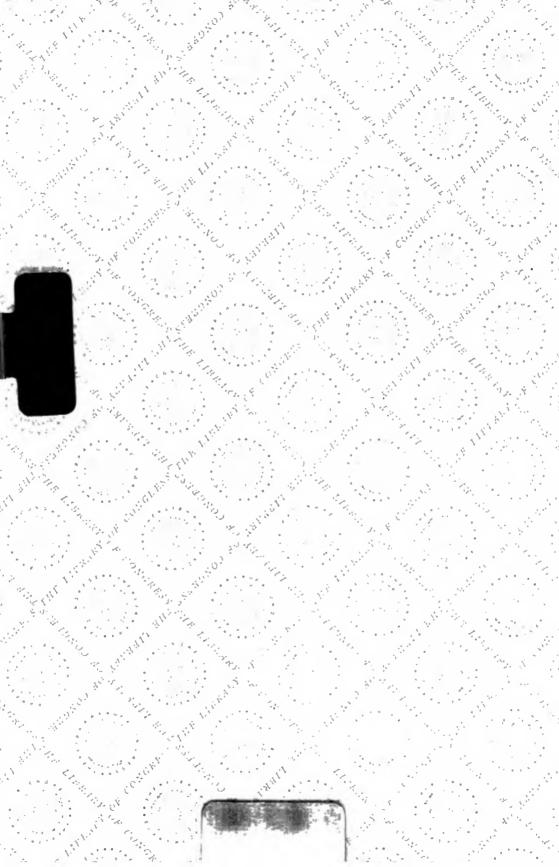
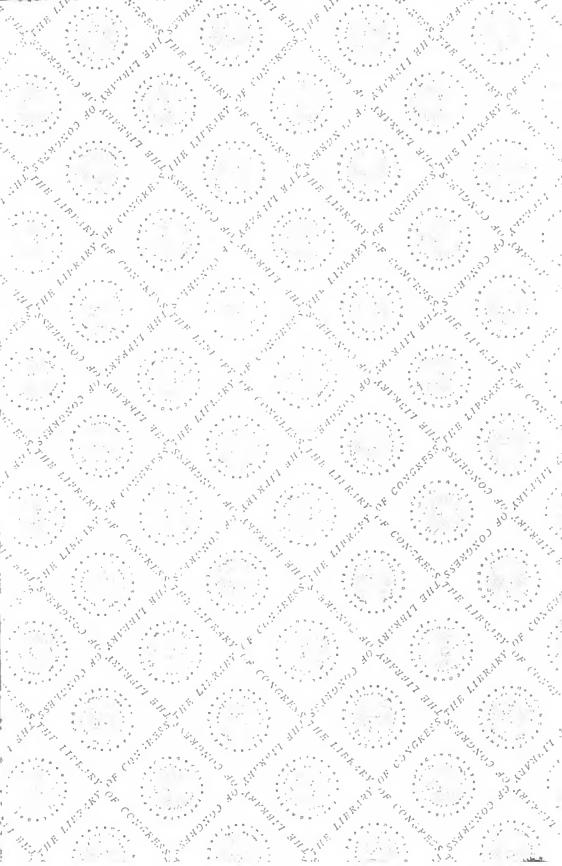
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# EXTENSION OF AUTHORIZATIONS UNDER THE NOISE POLLUTION CONTROL ACT OF 1972

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BEFORE THE

# SUBCOMMITTEE ON TRANSPORTATION AND COMMERCE

OF THE

# COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE HOUSE OF REPRESENTATIVES

**NINETY-FIFTH CONGRESS** 

FIRST SESSION

ON

THE IMPLEMENTATION OF THE NOISE CONTROL ACT OF 1972

APRIL 19 AND 21, 1977

Serial No. 95-10

Printed for the use of the .
Committee on Interstate and Foreign Commerce



U.S. GOVERNMENT PRINTING OFFICE WASHINGTON: 1977

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# EXTENSION OF AUTHORIZATIONS UNDER THE NOISE POLLUTION CONTROL ACT OF 1972

#### TUESDAY, APRIL 19, 1977

House of Representatives,

Subcommittee on Transportation and Commerce,

Committee on Interstate and Foreign Commerce,

Washington, D.C.

The subcommittee met at 2 p.m., pursuant to notice, in room 2218, Rayburn House Office Building, Hon. Fred B. Rooney, chairman,

presiding.

Mr. Rooney. Today begins the first of a series of hearings on the effectiveness of the Noise Control Act of 1972. The focus of these hearings will be to determine (1) the validity of the recent criticisms of the implementation of the noise program; (2) whether the noise program should be reauthorized and at what level of funding; and (3) legislative remedies that will clarify and ensure the implementa-

tion of congressional intentions.

Because of the many problems that appear to surround the effectiveness of the noise program I, at this time, do not intend to seek additional funding for the program. Instead the program should operate on a continuing resolution for the next year. This means that the office will remain at the same funding and staff levels as exist at present. During the next year I intend to undertake a series of initiatives that hopefully will rehabilitate the noise program so that noise pollution can be effectively reduced.

First: I intend to request that the Environmental Protection Agency and other Federal agencies involved in noise abatement make quarterly reports to this committee on their cooperation in addressing

the noise problem.

Second: I intend to ask the General Accounting Office to continue monitoring the progress made by EPA and other Federal agencies to

implement the noise program.

By taking this approach the committee will be able to intelligently conclude whether or not the existing program is workable if an effort is made to make it work. Therefore, before another increase in funding for this program is made, either the program will be implementing congressional intent or the Congress will restructure the program so as to ensure implementation of congressional intent.

Our first witness today will be Mr. Chuck Elkins, Deputy Assistant Administrator for Noise Control Programs, Environmental Pro-

tection Agency.

You may proceed, Mr. Elkins. I would appreciate very much if you would introduce your colleagues for the record.

STATEMENT OF CHARLES L. ELKINS, DEPUTY ASSISTANT ADMINISTRATOR, NOISE CONTROL PROGRAMS, ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF NOISE ABATEMENT AND CONTROL, ACCOMPANIED BY JOHN C. SCHETTINO, DIRECTOR OF TECHNOLOGY AND FEDERAL PROGAMS; HENRY E. THOMAS, DIRECTOR, STANDARDS AND REGULATIONS DIVISION; ALICE SUTER, HEALTH AND WELFARE EFFECTS STAFF; JOHN F. DEGNAN, DIRECTOR, PLANS AND PROGRAMS; AND NORMAN D. SHUTLER, DEPUTY ASSISTANT ADMINISTRATOR, MOBILE SOURCE AND NOISE ENFORCEMENT, OFFICE OF ENFORCEMENT

Mr. Elkins. Thank you, Mr. Chairman. I am Charles Elkins, Director of the noise control program at EPA. I have with me Mr. John C. Schettino who is the Director of Technology and Federal Programs Division; Mr. Henry E. Thomas, Director of the Standards and Regulations Division; Miss Alice Suter who is from our health and welfare effects staff; and Mr. John F. Degnan, Director of our Plans and Program Office. They will assist me in answering any questions you might have.

Mr. Rooney. Do you want to have them appear at the table? I think we can proceed in this way and then if need be we can ask

them to come forward.

Mr. Elkins. Mr. Chairman, we at EPA are pleased that you are holding these hearings on the extension of authorities under the Noise Control Act of 1972. I, personally, appreciate this opportunity to discuss the implementation of the act and the findings and recommendations relating thereto in the recently published General Accounting Office report. In my testimony I will discuss: (1) EPA progress to date; (2) future plans; and (3) EPA/FAA relations.

#### PROGRESS TO DATE

When the act was passed in October of 1972, EPA had only 12 people in noise control, and it was necessary to concentrate on the highest priority requirements of the act. Therefore, EPA initially focused its efforts on assessing the level and extent of noise impact and, in July 1973, published the "Criteria Document," which represents an appraisal of available knowledge relating to the health and welfare effects of noise. In March 1974, the EPA published the "Levels Document," which identifies levels of environmental noise requisite to protect the public health and welfare, with an adequate margin of safety. Both of these documents were vital for subsequent development of regulations.

The next phase of our effort, and one which has dominated program priorities to the present day, was the identification of major noise sources and the establishment of future product noise emission standards. In our first identification of noise sources, published June 21, 1974, we listed portable air compressors and medium and heavy duty trucks. Final regulations for air compressors were pub-

lished on January 14, 1976, and for trucks on April 13, 1976.

Division the capability to test regulated products at an EPA controlled site. The facility presently has capability to test trucks and air compressors and will be modified to provide testing capability for ad-

ditional products as standards are set.

The enforcement program will consist principally of three elements: production verification, which is the testing of representative early models of a product; selective enforcement auditing, which is statistical sample testing of products selected from the assembly line during the production year; and in-use enforcement, which refers collectively to surveillance of products in-use, enforcement of the prohibition against tampering with noise control systems, and assurance that manufacturers provide required noise-control-related maintenance instructions and warranties.

Mr. Rooney. The committee will recess for 15 minutes for the purpose of voting on something that is ironic, the Environmental Protec-

tion Agency R. & D.

[Brief recess.]
Mr. Rooney. You may be interested to know that that bill just passed by a vote of 358 to 31.

Mr. Elkins. I am glad to know that.

Mr. Rooney. Unfortunately there were no noise funds in it.

Mr. Elkins. Mr. Chairman, I forgot to introduce to you at the beginning Dr. Norman Shutler who is Deputy Assistant Administrator

for Mobile Source and Noise Enforcement.

Picking up again on page 5 of my testimony, in the middle of the page: The noise enforcement facility over the last several months has been conducting cooperative test programs with truck and compressor manufacturers to assure that industry-owned test sites yield noise testing results which correlate with those of EPA's facility. The great bulk of the required testing under the regulations will be performed by manufacturers at their own facilities subject to occasional EPA oversight, including simultaneous data acquisition with one of our two mobile noise enforcement facilities. We expect initial submissions by manufacturers of information required under the regulations and initial production verification testing to begin late this year in preparation for the January 1, 1978 effective date for the truck and compressor regulations.

An amendment relating to civil penalties for this act has been prepared and is now under review by the administration. The lack of a civil penalty provision in section 18 affecting interstate motor car-

riers was noted in the GAO report.

#### FUTURE PLANS

As I mentioned earlier, the EPA strategy for implementing the Noise Control Act was initially focused on the accomplishment of high priority requirements mandated by the act. Starting in fiscal year 1977, however, we began to shift resources and attention to other areas of the act which we had not emphasized previously. I would like to briefly discuss our future plans in these areas, as well as future plans in the product regulation efforts.

One major area of emphasis will be expanded assistance to State and local agencies; in 1976 a major reorganization of the EPA noise office was made in order to make the office more efficient and to shift our focus more toward assistance to State and local programs. We are convinced that efforts at the State and local level are essential to provide immediate relief from noise, to provide control of "nuisance" and other nonfederally regulated sources of noise, and to assist in the enforcement of EPA standards. In-use controls will still be required for federally regulated products since, in many cases, the technology is limited or the cost is prohibitive for levels which would be

fully protective of health and welfare.

With increased public interest in noise control, the level of State and local activity is increasing; there were 288 localities with noise ordinances in 1973, which increased to 652 in 1976. Our current efforts include two new programs. One, the ECHO program—Each Community Helps Others—involves EPA coordination and support through our regional offices in a process whereby communities with existing programs can provide technical advice to other communities in the same State or region in setting up noise control programs. The other program is called the quiet communities program and would involve direct EPA assistance for up to five demonstration communities nationwide in setting up noise control programs, which in turn would become part of ECHO. The ECHO program is scheduled to begin in fiscal year 1978; the quiet communities program, now in a planning phase, may be implemented in fiscal year 1978, as resources permit.

Another area of activity will be the coordination of Federal programs. This has two facets I would like to mention. One is the coordination of Federal research. We have reactivated four interagency noise research panels—noise effects, aircraft noise, surface vehicle noise, and machinery noise—which generated reports covering the fiscal year 1973–1975 period on Federal noise research and development efforts. These panels will now update the data base and assess the contribution of the ongoing and planned Federal research and development programs to meet the long-range goals of a national noise abatement and control program. We are planning to be in a position this summer to support a coordinated Federal program of

noise research and to influence budgetary decisions.

The other facet I would like to mention is the development of a number of joint demonstration programs we are undertaking with other Federal agencies. Examples include a "quiet truck" program with the Department of Transportation and a program controlling off-road vehicle noise in recreational areas with the Forest Service. We hope that these demonstration efforts will lead to a more cooperative atmosphere in the coordination of Federal noise control

programs.

Emphasis will also be placed on the implementation of a labeling program. We expect to publish shortly a proposed regulation setting out general requirements for product labeling and a specific requirement for labeling of hearing protectors. We feel that for many products labeling offers an alternative, or at least a desirable supplement, to Federal noise emission limits. Product labeling will offer consumers an opportunity to deal directly with noise pollution by enabling them to make informed choices.

Of course, we plan to continue with the development of noise emission limits for appropriate sources. Some effort will continue in the construction area, where many of the noisiest products are or are about to be regulated, and in the surface transportation area, where we have regulated trucks and are about to regulate motorcycles and buses. We also have under consideration automobiles and light trucks, rapid rail systems, and tires. Additionally, we are examining other categories including household products and consumer products for possible emission regulations or labeling requirements.

#### EPA/FAA RELATIONS

At this point I would like to address in some detail the implementation of section 7 of the act and our relationship thereunder with the Federal Aviation Administration.

The major findings pertaining to aviation in the GAO report were that: "little progress has been made in issuing final aviation noise control regulations proposed by the EPA to the FAA, and that serious problems in coordination between the EPA and the FAA have

hindered the development of aviation noise regulations."

Although the FAA has completed action during the past few months on 7 of the 11 regulations proposed to them by EPA, we would agree with the GAO that an excessively long time was required for these decisions to be reached. Nevertheless, despite the slowness in issuing regulations resulting from the FAA independent actions, EPA's proposals, or a combination of both; it is our opinion that some modest improvement in reducing aircraft/airport noise will result. We are not satisfied with this result since we believe that within the statutory constraints it was possible for the FAA to issue the more stringent regulations, with the resulting benefits proposed by the EPA. For example, the regulations for propeller-driven small airplanes proposed by EPA would have required the noise levels of those aircraft to be from 2 to 11 dB lower, depending upon airplane weight, than the levels in the rule finally prescribed by the FAA. We estimate that those noise level differences would translate to a reduction in the noise impacted land area of about 18 to 74 percent less than will result from implementation of the FAA rule, which for that matter requires no reduction in noise levels for most of the small propeller airplanes being produced and in current operation. The reduction in impact we estimate is significant when one considers that these type aircraft operate at approximately 95 percent of the 12,000 or so general aviation airports in the United States where they are a major aircraft noise source.

We applaud the FAA actions on retrofit and noise abatement flight procedures in the vicinity of airports, actions which were also proposed by the EPA. These actions will bring needed relief to neighbors of our major airports through 1985. However, increasing numbers of operations projected for the future will quickly dissipate these benefits after which a steady increase in impact will again occur if further steps are not now taken to significantly lower the permissible noise levels of new aircraft entering service in the years beginning in 1980. The revisions to the levels of the 1969 Federal Aviation Reg-

ulations, part 36, recently issued by the FAA, will do little more than delay the onset of increasing impact after the initial benefits of retrofit and noise abatement procedures are realized. On the other hand, EPA's proposal of October 1976, on which the FAA has yet to come to a decision, would continue the reduction in impact so that by the end of the century the approximately 8 million people nationwide presently experiencing day-night average exposure levels of 65 dB (Ldn 65) would be reduced to approximately 1 million people. To protect everyone residing in the vicinity of the Nation's major airports from this exposure level would require a reduction of 20 decibels or more in current transport aircraft noise levels which is clearly beyond the scope of noise control technology presently identified.

beyond the scope of noise control technology presently identified.

We believe that the preceding examples of the results of the actions taken by the FAA as opposed to the added benefits which could have resulted had EPA proposals been adopted clearly illustrate a fundamental difference in how our respective agencies approach the task of regulating noise. In our view, FAA regulations regulate only to the levels being essentially achieved by in-use aircraft rather than requiring the incorporation of new technology which has been demonstrated and is available. While FAA regulations may prevent potential escalation in the noise of individual aircraft, they do not

significantly reduce the impact of aviation noise.

EPA believes that future aircraft should utilize more fully the demonstrated results of federally funded, as well as industry funded, noise reduction research and development programs. We believe that industry should be required to demonstrate why it is not economically reasonable and technologically feasible to incorporate the best available technology after the cost of compliance has been taken into account. Unless the Government presses the industry to make such a demonstration it is predictable that regulations will result requiring only current in-use technology. We see no ready solution to this difference in approach, and I would like to quote from our letter of January 11, 1977, to the GAO on this point:

The performance of the Federal Government in the aviation noise area should be one of the major subjects of the oversight hearings conducted by the Congress in 1977. It would be appropriate for the Congress to explore the basic philosophical approaches of the two agencies and to contrast the performance in the aviation area to the performance in other noise control areas set forth by the act. In EPA's view the FAA's regulations under section 7 of the act require only current practice, while the EPA's regulations under section 6 require best available technology. Since the specific criteria for establishing standards differ in the two sections of the act, perhaps the outcomes should also be different, but fundamental policy questions divide the two agencies and they will continue to delay progress in the aviation noise area until Congress clarifies its intent.

Regarding the GAO's finding that there has been a lack of coordination on aviation matters between the EPA and the FAA, numerous attempts have been made by us to establish a basic agreement with the FAA on how we would consult and cooperate with each other on aviation-related matters, despite the adversary relationship established by the act. From time to time, as a result of interpersonal relationships that exist between our respective staffs, some degree of cooperation has been achieved. However, we believe that the philosophical problems that separate the two agencies cannot be solved by these

personal relationships. Nevertheless, it will continue to be our aim to keep the FAA fully informed on EPA's ongoing and planned aviation regulations and other aviation noise related matters in which we share a common responsibility.

Mr. Chairman, we believe that an examination of the record of our dealings and interactions with the FAA under section 7 of the

act will show that:

The FAA could have made a greater attempt to consult with the EPA at a point where we could influence the final outcome of their actions, and that

EPA's positions and recommendations on specific proposals were

seldom reflected in the final actions taken by the FAA/DOT.

Mr. Chairman, while the GAO recommendation to place a time limit on FAA actions in response to EPA recommendations is a good step forward, the fundamental philosophical differences that separate our agencies will remain. Nevertheless, we will continue to urge the FAA to require the use of the best available technology in the regulation of aviation noise.

In conclusion the report of the General Accounting Office has raised a number of other points, and we have answered them in full in our reply printed as appendix I of that report. The items discussed above, however, constitute the major problems that we have had with

the act, in my view.

Mr. Chairman, I welcome any questions.

Mr. Rooney. Thank you very much, Mr. Elkins.

In the GAO report the noise office is criticized for the slow implementation of the act. Since you have missed many of the deadlines set by the act, and have only set four standards for noise emission products in 4 years, what is your justification for such tardiness?

Mr. Elkins. Mr. Chairman, we have missed those deadlines primarily because we feel that the 2-year deadline imposed by the act

is in retrospect not a reasonable deadline.

Mr. ROONEY. Why?

Mr. Elkins. At the time we were reviewing the act while it was before the Congress, we expected that when we identified a product as a major source of noise, we would have readily before us enough data on the technology, the economic impact, and the health and welfare implications to meet the 2-year deadline. In the case of the first two identifications by the Agency, however, the Agency felt that it must proceed without having all that data before it. It is virtually impossible to collect that data, analyze it, propose a standard, have it reviewed in public, and have it promulgated within the 2 years allowed by the statute.

Mr. Rooney. Here is the report in 1972 which says that generally

the technology exists to control most indoor and outdoor noise.

Mr. ELKINS. It is true that there is some technology available in regard to a number of products. But in collecting it into a document which will support a rulemaking action, seeking out the best available technology—not just what is being used today by a lot of companies, finding out what the economic impact is—particularly under the rules for promulgation of regulations which now really control decisionmaking in the executive branch in terms of economic impact,

and inflationary impact, the existence of that technology simply does not mean that you can move to write regulations.

Mr. Rooney. Is there a strategy for the implementation of the

Mr. Rooney. Who in your agency at that time knew about the noise strategy?

Mr. Elkins. Knew about the existence of it?

Mr. ROONEY. Right.

Mr. Elkins. The basic structure of how I wanted to change the program—which is essentially how the new strategy differs from the old strategy—was discussed at the time that I presented my reorganization plans to my superior, the Assistant Administrator for Air and Waste Management, who is the line manager for this program now as well as prior to my appointment.

Mr. Rooney. Why did you disband the noise research panels whose duty it was to coordinate the noise research effort at the Federal

level? And I do have some figures here.

Mr. ELKINS. The research panels were pulled together initially to prepare the report which Congress had called for, that is, a review of the noise research ongoing in the Government and an assessment of that research. Those panels met two or three times each over a period of several months, and as a result, the data collected from the various

agencies were incorporated into the report.

The GAO, I think, correctly criticizes the Agency in saying that that report is less than what we would have all wished. It was a good compilation of what was ongoing but it really did not ask a lot of hard questions about whether it was good enough and whether we needed more. The research effort quite clearly Mr. Chairman, received less emphasis in terms of personnel and resources than the promulgation of regulations. For that reason not a great deal was done with those panels after about August 1974, until we decided in the reorganization to reactiviate them. The responsibility for the panels was transferred to the noise control office at about the same time that I became the Director. Prior to that time it was under the research and development organization in the Agency. I decided that I needed to devote personnel on a full time to this activity and that the panels should be reactivated. That has been done, and we expect to have an initial assessment of government-wide noise research in the next couple of months.

Mr. Rooney. Did you do that after the GAO report?

Mr. Elkins. No. The first we received any of the GAO comments was in a meeting sometime in June and we saw their report much later than that. We got permission from the Assistant Administrator to reactivate these panels sometime in May. As it happens, the GAO and we were thinking along the same line. It is conceivable that some comments they made to my staff started people thinking and making recommendations to me. I do not think it is very profitable to argue about where great ideas came from: in any case, we were both thinking along the same lines, and EPA has now essentially complied or is in the process of complying with the GAO recommendations.

Mr. Rooney. Do you think that you are going to have a noise pollution abatement program within the very near future that can be

implemented?

Mr. Elkins. We believe that we have one now.

Mr. Rooney. Then what is your justification for reducing your noise research program from \$545,000 in fiscal year 1975 to \$45,000 in 1976 and for fiscal year 1977 and 1978 you did not seek any funding?

Mr. Elkins. First, I must indicate—

Mr. Rooney. Which incidentally was in the R. & D. bill that we

just voted on.

Mr. Elkins. That is correct I must indicate first that the initial decision as to whether or not research on noise is to be done by the Agency is in the research organization and not in my office.

Mr. Rooney. Why it is not in the EPA's 5-year research plan?

Mr. Elkins. The feeling of the research office, which they developed over a period of 2 or 3 years, was that a two or three man research program, which is what they had in noise, was really counterproductive. When we have even a very small noise research program, other agencies look to us to produce research and be active in the area, but with three people and a half million dollars it really is not very realistic. Other agencies would stop doing their work and turn to us to do things which we were not capable of doing. So the research office decided it would be more productive but more productive to have a zero budget and to transfer the coordinating responsibility over to my office which had a larger staff. Of course none of the effort at that point was directed to research. Rather, it was to coordinate the activities in other Federal agencies, to assess what needs to be done, and hopefully to encourage other agencies to do the necessary research.

One decision I see coming forward out of this research assessment which my office is now doing is that we will probably identify a large number of needs for noise research which are not now being met. At that time all agencies, including EPA, will have to make recommendations to themselves, and to OMB in regard to what research should be done. We may very well find at that point that EPA must get back into noise control research, and that it will be inadequate to depend on the other agencies. Given the staffing the research people had, I guess I have to share their view that it was counterproductive.

Mr. ROONEY. I can recall the EPA hailing the purchase of the noise research lab in Sanducky, Ohio, and at the same time you request no research funds for fiscal 1977 and 1978. Explain that to me.

Mr. Elkins. The facility at Sanducky is not a research facility. It is an enforcement facility to test products to see whether they comply with the provisions of our regulations and to use it to bring enforcement actions against those who are in violation. Conceivably one could do occasional research projects there because of the existence of the test pad. But it is not a research facility, and it does not have a research staff. It has an enforcement staff.

Mr. ROONEY. Mr. Metcalfe.

Mr. METCALFE. Thank you, Mr. Chairman.

The investigation by the General Accounting Office indicates that EPA has given a low priority to such areas as labeling, technical assistance, and research coordination. Do you agree with this assessment?

Mr. Elkins. Mr. Metcalfe, that is a true assessment of our allocation of resources in the early years of the act. We felt that this was essentially in accord with the directive of Congress. Section 6 of the act, which requires regulations, and section 7 which requires interaction with the FAA, mandates specific dates to be met, as do sections 17 and 18 as well. It was our belief that Congress was clearly telling

us that in cases where they set specific dates to be met, these were the higher priority items, and if one has finite resources, one must devote such resources to accomplishing those things which are clearly most important. Not only did we feel this was clearly the intent of Congress, we also felt it made sense. Specifically we felt that it is appropriate to regulate new trucks rather than to label other products at that time, if we had to choose between those two. New trucks are a major source of noise and a very serious problem. Our regulations, for instance, will reduce the urban traffic noise by 29 percent by just regulating new trucks. We felt this regulation would have a big impact and should be gotten on the books as soon as possible. Although labeling is an important program, when we had to choose, we felt it was better to choose the initial regulations mandated specificially by date by the Congress.

The reorganization and the strategy which I described a couple of minutes ago takes the approach that it is now 1977, we have accomplished or have under way almost to the point of proposing regulations, a number of regulations which take care of many major sources of noise, and it is now possible to devote a larger proportion of our resources to the labeling program, to technical assistance, to State and local programs and to research coordination, and to coordination of other Federal programs which have an impact on noise control, such

as the Federal highway program.

Mr. Metcalfe. You did agree with the GAO report that it has a low priority in the statements you have just made. Are you justifying why EPA gave a low priority to these very important aspects?

Mr. Elkins. That is correct. The strategy which we wrote 2 months after the bill was passed explicitly indicated that we would give lower priority to these activities in order to get the other work done. It was a hard choice, but a choice we felt we had to make. We now are shifting the priorities so that more resources are going into these other activities. In the GAO report there is a budget breakout on page 34 which shows that in our budget for 1977 technical assistance to State and local governments is budgeted this year for \$1,700,000 while just last fiscal year it was less than a million dollars. So, it is almost double.

Mr. ROONEY. Will the gentleman yield?

Mr. Metcalfe. I will be happy to yield, Mr. Chairman.

Mr. ROONEY. Senator Randolph in September 1973 asked the question, "How will the process of requiring labeling be carried out? When will the labeling requirement begin to take effect?" Do you know the answer?

Mr. Elkins. Not specifically. Mr. Rooney. The answer:

In the process of implementing the labeling requirement is part of the overall source identification and regulatory process and is being initiated at the present time. Initial labeling regulations are expected to be promulgated by the end of fiscal year 1974.

Mr. Elkins. The action which that answer is addressing is the hearing protector labeling program. That was, we felt, the exception to the general rule which I was just indicating, that is, in most cases a section 6 regulation would be more important than labeling action.

In the case of hearing protectors we felt that human health was at stake so action was begun on the regulation. We have had a great deal of difficulty in proposing that regulation. It should be out within 30 days from now. We have been late in that regard. One of the reasons we have delayed the last 6 months or so is that we decided at the same time we propose regulations for hearing protectors that we should also propose general provisions that would cover the entire labeling program. That way the public can give us their comments on the entire program to guide our future decisions in the labeling program.

Mr. ROONEY. Thank you. Mr. Metcalfe.

Mr. METCALFE. Mr. Elkins, according to the General Accounting Office, EPA has identified 11 major sources of noise. Yet EPA has issued final regulations on only two of these major sources of noise, portable air compressors and medium and heavy duty trucks. Why has the EPA not issued regulations for the other major sources?

Mr. Elkins. Of the 11 products, they breakout as follows, Mr. Metcalfe. We have six products which were identified in May of 1975. They are loaders, dozers, compactors, refrigeration units, buses, and motorcycles. We expect to propose those regulations some time in the next 2 to 3 months. They are all drafted now. It is a matter of going through the clearance process in the administration, particularly within our Agency. In addition to that, we have low noise emission product regulations for two products, special local conditions regulations, and the labeling regulations which we just discussed. Consequently, the major answer to that question is that we hope to have a good number of those regulations proposed in the very near future.

I think that I have answered as well your question in terms of why it takes so long—it is the large amount of analysis which we feel is necessary before one can promulgate a standard and the fact that the data had not been collected at the time the act was passed.

Mr. METCALFE. Mr. Elkins, you indicated that in the future—you prefaced that by saying "near future"—that you hope to implement

these regulations.

Mr. Elkins. I would expect, for instance, on three of those six products that the regulations would be in the Federal Register within the next 6 weeks. On a couple of the others they will follow behind that by 4 to 6 weeks more. Particularly on motorcycles, that one is running behind the others because we decided to take 2 or 3 months extra to have full participation by the public in the decisionmaking before we propose a rule. We have met with a large number of motorcycle groups and State officials. We find a great deal of interest in motorcycle noise. We have tried to incorporate their views into the decisionmaking process. So, yes, the answer is in the near future.

Mr. METCALFE. Thank you. EPA has authority to require that any product which is capable of emitting a noise which can harm public health or welfare be labeled to indicate its noise level. Have you issued any regulations in this area?

Mr. ELKINS. The first regulations under that section will be published very shortly, probably within 6 weeks. That will be the one

on hearing protectors as well as general regulations to cover the entire span of that section. These general regulations will have provisions which will apply to every product that we label and will give the public view, right here at the start, of what would be required of manufacturers and what kind of information would be available to the public under the labeling program. We would then proceed very quickly to label additional products.

Mr. METCALFE. Thank you. The GAO charges that EPA has not been effective in coordinating the noise research and control programs

of all Federal agencies. Do you agree with that charge?

Mr. ELKINS. Yes: I think it is fair to say that we have not been as effective as we should have been and could have been in that program. Part of it is the decision not to allocate sufficient resources, but I think also we probably could have done a better job.

Mr. METCALFE. What are you presently doing to improve and do a

better job?

Mr. ELKINS. We are reactivating those panels and all reports indicate that they are working effectively. It is anticipated that within the next couple of months we will be in a position to advise each agency on how they might budget for the coming fiscal year and be able as a group of agencies to make recommendations to OMB for the overall level of noise research for the Federal establishment.

Mr. METCALFE. Mr. Chairman, I have just one more question. Mr. Rooney. Would you yield to me to ask this question?

Mr. METCALFE. Yes.

Mr. Rooney. The GAO in their report indicated that there is hostility between the other agencies Is that hostility there, has it im-

proved and what are you doing to improve it?

Mr. Elkins. I think there is some still there, but we have done a great deal to overcome it. I think in the case of the research panels that a great deal was achieved by the simple act of designating, someone from an agency other than EPA as the chairman of each one of these panels. That makes it clear to those agencies in ways that speak louder than words that each panel is to function for the good of all the agencies and not just the EPA's purposes. You may want to ask each agency, yourself, rather than taking my word for it, but I think that the agencies are now much happier with the way things are going in the research coordination area.

Mr. ROONEY. Do you think you are going to improve on the

agency's expenditures for noise research?

Mr. Elkins. I know we are going to improve in one sense, Mr. Chairman. I think that the Federal Government, not just EPA, will be in a much better position to know what is being done, and more importantly, what needs to be done and how much of a gap there is. Whether with today's set of priorities, with energy and other very important matters, the executive branch, will decide to allocate more money to noise research. I can't say. I will say this, that when money is tight—and it certainly is tight today—it helps to get more money if you can justify it in terms of need and not merely say, "There is not enough money for noise control research, why don't you give us more?" or "See what it used to be in 1973. Why don't you take us back to that level?" We think that not just EPA, but all the agencies.

will be better equipped to make that case. I have spoken to our colleagues at OMB. They are receptive to having this coordinated government-wide presentation of the need. It is a rare opportunity in the executive branch. I think they look forward to using it as an example for how budgeting for research ought to be done.

Mr. ROONEY. I thank the gentleman. Mr. Metcalfe.

Mr. METCALFE. What do you think of the adequacy of the Federal Aviation Administration's flight and operations noise control? Is it adequate?

Mr Elkins. Are you speaking specifically of their regulations having to do with take-off and approach or are you talking about all of

their noise control regulations?

Mr. Metcalfe. I am talking about all of their noise control

regulations.

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Mr. Elkins. We feel that at the time the Noise Control Act was enacted, the Congress had a very strong sense that something was really wrong in the aviation noise area, that there were serious problems that had been there for 15 to 20 years, growing larger every year, and that strong action was needed. Some activity has taken place during the last 4 years. Some of it was stimulated by us and some of it, I think, the FAA can rightly take credit for, that is, putting more resources, more effort on it. But in terms of the total effort I must say that it is our view that what has been done is a very small step toward solving the large problem which the Congress identified, and unless something substantially different is done, we are going to have this problem around for 20 more years, if not longer. If we want to control noise from aviation 20 years from now, the best approach is to control the new aircraft that are being designed today and going into service. It is possible to retrofit aircraft, and this is one thing that FAA has directed be done, but that can only go so far. We need to have quiter aircraft designed. In our view the FAA has not promulgated regulations that would require that. For instance, just last month they promulgated a new rule which applies to new designs of aircraft, that is, what kind of aircraft should be designed now, and these standards can now be met by aircraft which are now flying, specifically the L-1011's and DC-10's. I think it is fair to say that FAA regulations are conservative. They look at the technology that is flying in the skies today and say, "Now when you design engineers are designing new aircraft make sure you make those aircraft as quiet as the ones we have flying today." They may make these decisions because of economic considerations or whatever. I have some difficulty understanding clearly what the problem is, but in our view, with the proposals we have sent to the FAA, we feel that more stringent standards are possible. In addition to that, they are necessary. Such standards are probably the most cost-effective way to deal with the problems that the Congress identified. A lot of people have looked at the relationship between EPA and FAA and said, "Well, it must be because Charles Elkins and his counterparts in FAA, just get angry at each other and can't speak to each other." Quite frankly, sometimes we do have difficulty in conversing, but that is really just the surface problem. The basic problem is that we approach the problem from different philosophies, and we interpret the act differently.

I see no cure to that problem. We have sent 11 proposals over to FAA

and have had very little effect.

Mr. Metcalfe. Much of your interpretation has been promulgated as a result of the public concern with the noise level of a plane taking off and also landing and therefore you are directing your energies and your efforts to those two levels. Has there been any public outcry over the total noise level after a plane has taken off and prior to its descent?

Mr. Elkins. You mean aircraft just flying at a level?

Mr. Metcalfe. Yes.

Mr. Elkins. I think you are correct in saying that most of the problem has been takeoff and landing. Aircraft with pressurized cabins climb to cruise altitude as quickly as possible where their noise is not a problem. So I would say it is almost all takeoff and landing. Keep in mind, however, that they are many miles from the airport by the time they get to their cruise altitude.

Mr. Metcalfe. Thank you very much, Mr. Chairman. I have no

further questions.

Mr. Rooney. This is not a very controversial issue but what do you think of the SST takeoffs and landings in the United States?

Mr. Elkins. Mr. Chairman, we have spent a considerable amount of time dealing with the SST problem, mainly because we felt that the data need to be analyzed and hopefully to be put forward in an objective way. FAA has done a good deal of work and done an objective assessment of data as well. After reviewing all that, we recommended to the FAA in rules which they have now before them that the SST not be allowed to fly into airports of this country. That is a very radical position, a very unpopular one. We feel the analysis justifies it, not because of one or two aircraft, but if one has 25 SST's of the present version flying into airports such as JFK you are going to have a substantial impact on the health and welfare of citizens who today are already subjected to more than they should really be asked to endure.

Mr. Rooney. Are you participating in the 16-month evaluation

with FAA?

Mr. Elkins. The FAA asked us to sit on a group to review the plans for the monitoring at Dulles and JFK, and we acquiesced to do that. We were not terribly enthusiastic, quite frankly, about the 16-month trial. But we agreed with the FAA, that if there is going to be one, the monitoring should be done in as objective and fair way as possible, and we did provide our advice to the FAA. We are not physically doing any of that monitoring. We have seen the reports that the FAA publishes each month.

Mr. Rooney. Mr. Santini.

Mr. Santini. Thank you, Mr. Chairman. I believe you and Mr. Metcalf certainly probed all of the apparent regulatory deficiencies. Those that you have perhaps overlooked may have been touched on effectively by the Controller General in his March 1977 report. Mr. Elkins, I think you have set a precedent for other agencies to live by. This is my first encounter with a Government agency that does not rush through rules and regulations. I don't know if it is a precedent that other agencies would care to follow as it has certain disturbing implications.

Mr. Elkins. I am sorry, sir, I did not get your point.

Mr. Santini. You have established a unique precedent at least in so far as this member's observations are concerned. You are the first Governmental agency that I have encountered that has not rushed through the rules and regulations process and determined the impact of the consequences of their rules and regulations after they were implemented. I gathered you did this reluctantly rather than enthusiastically and as a consequence of internal administrative decisions about priorities of both budget and personnel. I hope when the time comes for you to effectively implement your 1972 mandate that you will exercise the same caution and consideration

that has characterized other Federal rulemaking processes.

Mr. Elkins. If I might comment on that, I think that there are two reasons which I touched on why things have gone as slowly as they have. One, of course, is that we are subject to finite budget constraints like any other program. Secondly, we are not dealing here with regulations which the public, the courts, or the industry, accepts as being immediately required with no questions asked. We have seen recently even in the case of saccharin, where the concern is with cancer, that the public is beginning to question the costs and benefits. When you get to a problem such as noise the public correctly asks the questions: What do we get out of noise regulations? How much do they cost? What are the benefits? Is it technically feasible? Will it close down firms? We think those are appropriate questions for the public to ask a Government agency, and we have set about to try to answer those questions before somebody takes us to court to find out why we didn't ask them. We have been, I think thorough in our approach, but I would suggest probably not any more thorough than the court decisions would ultimately require us to be in any case.

Mr. Santini. I certainly reiterate my encouragement for as thorough a deliberation as you can have to precede your rulemaking

responsibility.

Thank you, Mr. Chairman. Mr. Rooney. Thank you, Judge.

Ms. Mikulski.

Ms. Mikulski. I am particularly interested in the enforcement of this regulation. I would like to get some more information on the issue of trucks. You have established regulations on noise emission

of trucks. How is this enforced?

Mr. Elkins. If I could, I would like to ask Dr. Shutler to join me at the table. There are two parts of the program that deal with trucks. One has to do with existing interstate carriers, and a rule was promulgated that required those carriers to retrofit their present trucks. The other program is to tell manufacturers what levels their new trucks should meet. The program having to do with existing interstate carriers is enforced by the Department of Transportation Bureau of Motor Carrier Safety. The manufacturers' truck regulation is enforced by EPA, by Dr. Shutler's group. We have maintained a relationship with the Department of Transportation and Dr. Shutler will be glad to indicate our view of how things are going in terms of how that is enforced.

Ms. Mikulski. My question focuses primarily on trucks that are

already on the road, not the new ones.

Dr. Shutler. In that area, the responsibility for enforcement does fall to the Bureau of Motor Carrier Safety (BMCS) of the Department of Transportation. They utilize field inspectors that are already on the road enforcing other transportation-related standards to run noise emission tests on trucks that are pulled off at appropriate locations along the road.

Ms. Mikulski. How do they do that? You know I am in a major truck carrying district. For 5 years I have yet to see anything

inspected in my community.

Dr. Shutler. I must confess I have not seen a test in progress either. However, they do test a substantial number of trucks. I think the number they have tested so far is in the order of a couple of thousand.

Ms. Mikulski. Every day 800 trucks go past my family's bakery. Dr. Shutler. Yes, ma'am. The way they run a test is a stationary runup test. The truck is parked, put in neutral and the engine is revved up to a prescribed level. Then the noise reading is taken at a distance of 50 feet. Initially the data acquired by the BMCS indicated that the percentage of trucks they were testing that apparently exceeded the standard level of 88 decibels in the case of a stationary runup test was on the order of 14 percent. This was about 11/2 years ago. Since then they have been sharing with us the data they have accumulated, and this noncompliance rate apparently has been dropping steadily. The last installment we had indicated that this noncompliance rate that started out in the neighborhood of 14 percent had dropped down, I believe, to the neighborhood of 5 or 6 percent. We have not run statistical tests to determine the significance of this apparent improvement in compliance rate, but nevertheless what we have seen thus far is encouraging.

Mr. Metcalfe. Will the gentlelady yield for a question? Ms. Mikulski. Certainly, but I would like to continue.

Mr. Metcalfe. What is the average age of a truck?

Dr. Shutler. I can't answer that. I bet Hank Thomas could.

Mr. Thomas. Trucks can run 15 to 18 years in age. However, the first purchaser of the vehicle would normally hold that truck for about 4 years, particularly the fleet owner purchasing that truck. It will then be sold to a second owner. He will run it, probably rebuild the major components of that truck which will run it out 3 or 4 more years. That truck has probably been depreciated out for the second owner at that point. In some cases if it has not been completely run out at that stage, it will be purchased by yet a third purchaser and run right into the graveyard.

Mr. Metcalfe. What about the noise level of the first owner who has the truck? Does it increase with age or what has been your experience with the first owner, the first few years? The older the truck does it emit more noise or is it the same after the motor has been gone

over?

Mr. Thomas. There is a two-part answer to that, Mr. Metcalfe. Based on the information we have so far, if that truck is maintained in accordance with the manufacturer's maintenance instructions, well-

maintained and looked after, there is very little likelihood that that truck noise will actually increase by any significant degree. What happens is, and we have seen this on fleet trucks going through the first 4 years, the fleet owners of these trucks get a lot of mileage and a lot of return on revenue out of those trucks. They maintain them extremely well. By the time one of these trucks hits that second owner, however, liaving been depreciated out almost completely in the first 4 years, the maintenance performed starts to drop off. So, the maintenance costs start to go up and the actual mileage runup on these trucks begins to drop something dramatically. Where that truck may go up as high as 150,000 miles a year or more during its first 4 years, mileage with the second owner may be halved. By the time it is operating with a third owner he will be putting very little money in that vehicle. Thus, with less maintenance, noise goes up, the optimal quality muffler system is not there, retread tires go on that may be noisier than original equipment, and therefore your noise with respect to that truck can go up very much indeed, sir.

Mr. Metcalfe. I am thinking in terms of two levels. Right now you are presently taking these and putting additional equipment in these trucks to cut down on the noise level of the truck. What are you doing about those trucks before you have come up with these regulations, the older trucks, those that have been on the road for

3 or 4 years or 2 years or 10 years?

Mr. Thomas. The older trucks, sir, were the subject of our section 18 motor carrier noise emission regulations which were promulgated by the Agency and are currently in effect. They set a noise level which was essentially a best practice, best maintenance type of rule. That is, it got rid of the pocket tread type design tires which were extremely noisy and it required that in-use trucks have an effective muffler system. I had the American Trucking Association tell me as late as last week that they have not found that regulation to be unreasonable for those who properly maintain their trucks. Some had been letting the trucks go so far in terms of maintenance that the cost to get them into line was much more extensive than obviously would be the case if simply replacing the muffler was all that was required. That regulation is currently at 86 decibels which compares with our new truck regulation of 83 decibels. New trucks under the new truck regulations which will go into effect next year, obviously will be quieter than the existing trucks on the road.

Mr. Metcalfe. What decibel? Mr. Thomas. At 83 decibel.

Mr. Metcalfe. The new trucks will still remain at 83 decibels?

Mr. Thomas. They will be at 83 decibels for a short period of time, then the regulation gets more stringent. Subsequent to that it goes down to 80 decibels in 1982, but that permits the manufacturer adequate lead time to effect necessary design to assure they can get those trucks down to 80. It is not an inexpensive process. However, we are currently working on revising the interstate motor carrier regulation so that those new trucks coming out at 83, and subsequently 80 dB, will not be permitted to degrade or get noisier. They will have warranty and maintenance instructions associated with them and antitampering provisions provided by the act to

assure those trucks retained the noise level of the manufactured unit.

Dr. Shutler. I want to correct one statement I made about the level of testing by the BMCS. I indicated they tested a couple thousand trucks. In fact I see they have tested nearly 14,000 trucks. Ms. Mikulski. That is a good 1 month's work. How many in-

spectors do they have?

Dr. Shutler. I don't recall.

Ms. Mikulski. Are you in charge of enforcement?

Dr. Shutler. I am in charge of the EPA enforcement program. Ms. Mikulski. You maintain a close liaison but you don't know how many inspectors they have?

Dr. Shutler. I don't recall at the moment.

Ms. Mikulski. Do they test only on interstate highways? Do they come into cities? Where do they decide to do their testing? Are these permanent testing sites or do they set up equipment like radar stations?

Dr. Shutler. I think they have testing sites that they will set up routinely on interstate highways since they deal with interstate

carriers.

Ms. Mikulski. I have been told by State and local enforcement people that testing for noise pollution is very difficult so that, in an urban community, if the city wanted to have their police force take noise tests, they could not really adequately test a moving vehicle.

Is that true or not?

Dr. Shutler. There are problems related to what kind of test procedure should be associated with a given standard. I have been told by some local enforcement personnel that the kind of test procedure that is associated with standards that are set are not capable of being implemented in a community environment or that the distance from the truck at which measurement is required to be taken cannot be practically achieved in all locations in the community. There is wide disagreement about how significant that problem is.

Ms. Mikulski. How wide?

Dr. Shutler. It ranges from those who say there are plenty of sites in a community environment-

Ms. Mikulski. Which is the prevailing view?

Dr. Shutler. Among the localities, at least in the State of Colorado, I would say the prevailing view is that the testing procedures are too restrictive. They do not allow them enough opportunity to test trucks. The view at the Federal level, at least at the Department of Transportation, is that there are ample sites.

Ms. Mikulski. Mr. Chairman, I have one or two more questions. Mr. Rooner. The gentlelady is recognized for as much time as she

desires.

Ms. Mikulski. Thank you.

Is it true that buses have the same engines as trucks?

Mr. Elkins. They have, in most cases, the same engines as medium trucks.

Ms. Mikulski. Why would they not be included in the regulations? Mr. Elkins. We chose to split them out and treat them differently. We have a regulation which will be proposed in the next month or two for buses. We felt that they are used in situations different than trucks in many cases. In many situations they are closer to residential buildings than trucks normally are, and, therefore, stricter standards might well be justified. Second, since they are medium-size trucks instead of heavy-duty trucks, the technology might well allow them to conform to a more stringent standard. Finally, the interior noise level may well be something that we want to set a standard on. So, at the present time we have a regulation in draft form, which we expect to clear through the Agency, which would require more stringent standards than for trucks and which does have a level for interior noise.

Ms. Mikulski. When will the regulations on buses be promulgated? Mr. Elkins. They will be proposed about 2 months from now. We have found by experience that it is very difficult to go from a proposed regulation through the public hearing process to a final regulation in less than 9 to 12 months. So that an outside date would

be 14 months from now.

Ms. Mikulski. It has been my observation that trucks are getting bigger and this seems to be the standard thing. What are the existing noise levels from these heavy-duty trucks and what effect do you think that the regulations will have on reducing the noise level in

these very heavy ones?

Mr. Elkins. The present noise level for trucks is about 86 decibels because of our regulations. New regulations which go into effect next January and again in 1982, reduce the levels to 83 and then to 80 and will apply to those heavy-duty trucks. So, we would expect that the very heavy trucks would comply with those more stringent standards. When they do, that will reduce the level of noise on our urban streets by 25 percent.

Ms. Mikulski. By 25 percent?

Mr. Rooney. Your family will have a quiet bakery.

Ms. Mikulski. Did you ever try to make Polish doughnuts with 800 trucks going by?

Mr. ROONEY. The dough keeps rolling in.

Ms. Mikulski. My questions are over. Thank you.

Mr. Rooney. I have one or two questions to ask. To get away from trucks and buses for a moment, I will ask what level of reduction of noise emission will your standards have for portable air compressors?

Mr. Elkins. We would expect that regulation would reduce the noise on construction sites by about 15 percent. When you combine

that with the truck-

Mr. Rooney. Compared with now?

Mr. Elkins. Compared to now; 15 percent reduction from the present situation. Combined with the reduction from dump trucks and other trucks that are used in construction, which are covered by the truck regulation, we will achieve a 45 percent reduction in construction noise. With those two actions, we have made a very significant contribution to reduction of construction noise.

Mr. Rooney. What percentage of the noise budget is used for

contracting out?

Mr. Elkins. We have about \$7 million of the \$10 million for contracts. The Noise Control Office has more contracts per employee

than any other office in EPA. Therefore, we do most of our work by contractor. The data collection and a great deal of the analytical work is done by contract. We still make the decisions and control those contracts carefully. We use the inhouse staff to review those contracts and to make the final decisions on the standards.

Mr. Rooney. With such a great percentage of your budget going

to contracts, do you have personnel to monitor the contracts?

Mr. Elkins. I think it is clear that we could not manage any more contracts than we are now.

Mr. ROONEY. What percentage do you contract out?

Mr. Elkins. Seventy percent of our budget.

Mr. Rooney. I have one final question. Why did the ARR seek an injunction against the EPA noise emission standards issued under

section 18 of the act?

Mr Elkins. Mr. Chairman, that is a very interesting case. This is a situation where the industry is suing the Environmental Protection Agency, asking us to promulgate noise regulations more extensive and more stringent than what we have already promulgated for them. Clearly they would like us to regulate as much as possible from the Federal level so as to preempt State and local agencies who want to deal with specific noise probems in their local neighborhoods, They believe that if we had uniform national standards applied to railroads, that is would be easier for them than when a specific noise problem is dealt with by a local community. The local standard probably has to be more stringent than the Federal standards. What we have done is promulgate rules which would allow local communities to deal with those noise problems which are local in nature which do not involve the movement of equipment from jurisdiction to jurisdiction. The local communities will not be interfering with interstate commerce in any normal sense of the term. They will be interfering perhaps in one sense of the word with companies which are in interstate commerce but the actual flow of equipment will not be affected. Local communities will have the authority, for instance, to require a railroad to erect a barrier between local residences and a railroad yard. AAR is not in any way eager to have that type of action, and they would like us to regulate all these activities on a uniform national basis. We have refused to do that. We do not think that is what Congress had in mind, AAR is now suing us.

Mr. Rooney. Thank you very much, Mr. Elkins. I appreciate very much your presentation here this afternoon and especially your candid responses to questions that the committee has asked. Thank

you.

Mr. Elkins. Thank you, Mr. Chairman.

Mr. Rooney. The Chair would like to bring to the attention of the committee two distinguished constituents of his. One is Miss Delores Caskey who is in town today for the purpose of listening to these hearings, very much concerned about the noise problem in the city of Bethlehem, and, Councilwoman Caskey, we are happy to see you here.

Ms. Mikulski. Is Miss Caskey a Councilwoman?

Mr. ROONEY. Yes.

Ms. Mikulski. So was I.

Mr. Rooner. And Miss Rita McInerney of the Bethlehem Globe-Times. We welcome you to the subcommittee today. We thank you for appearing.

Our next and final witness will be Henry Eschwege, Director of Community and Economic Development Division, General Account-

ing Office, Washington, D.C.

STATEMENT OF HENRY ESCHWEGE, DIRECTOR, COMMUNITY AND ECONOMIC DEVELOPMENT DIVISION, GENERAL ACCOUNTING OFFICE, ACCOMPANIED BY KEITH FULTZ, SUPERVISORY AUDITOR; AND WILLIAM KRUEGER, ASSISTANT DIRECTOR

Mr. Eschwege. Thank you, Mr. Chairman. On my right is Mr. William Krueger, Assistant Director of our Office who is in charge of our work at the Environmental Protection Agency, and Mr. Keith Fultz on my left is the supervisory auditor who was in charge of reviewing the noise control program at EPA.

Mr. Rooney. Mr. Eschwege, you were kind enough to present this statement to the committee 24 hours before this meeting. If you can summarize it we would prefer it. Without objection your statement

will become part of the record.

Mr. Eschwege. Thank you very much. We came here to discuss our March 1977 report on noise pollution of which you have a copy and to talk about our findings and conclusions now that this particular program has been legislated over 4½ years ago. As we pointed out, the implementation has been slow and in some cases ineffective. Some actions however have been taken. To date, as you heard before, four noise emission standards have been issued; all of them were late. There has not been too much progress in the final aircraft-airport noise reduction regulations and also we heard that there has been low priority given to product labeling, the technical assistance to States, and communities, and there has been a lack of research coordination.

We know that noise is harmful to about 13 million Americans, The noise, which plagues us all, comes from cars, buses, trucks, airplanes, and construction equipment. About 16 million Americans suffer from some hearing loss caused by noise. Of course, in addition to that there is the annoyance that keeps us from sleeping at night, et cetera.

The act requires the coordination of research. EPA is supposed to establish criteria on the levels of noise, to identify major sources of noise such as aircraft-airport noise, et cetera. EPA is supposed to propose these aircraft-airport regulations to FAA. With respect to research EPA is to coordinate the total research activity of the Federal Government. In addition, there are specific provisions for regulating the interstate rail and motor carriers. EPA identified 11 major sources of noise for new products, that is, compressors, and medium and heavy-duty trucks, motorcycles, lawnmowers, rock drills, et cetera. Final regulations have been issued on portable air compressors and heavy and medium-duty trucks. I do want to point out, though, that these regulations will not go into effect until January 1978.

By statute the regulations for railroads and motor carriers were to be promulgated within 12 months. The regulation was over 1 year late for motor carriers and over 2 years for railroads. On the railroad yard situation, as you heard previously, there is a court case. It is a matter that is in dispute and therefore the interstate railroad standards have not been enforced to date.

As I said earlier, there have been some problems with respect to research. It is to the point where research in EPA has gone from \$545,000 in fiscal year 1975 to zero right now. In fact there has been no request for research in the 1977–78 budget and there has

been nothing included in EPA's 5-year research plan.

As was mentioned earlier, EPA talked about the interagency panels that were established in February 1974. They have been inactive until very recently. They are now functioning again and we are hopeful that they will help to coordinate some of the research activity.

The strategy document that you discussed earlier is still not finalized. There was apparently a strategy document prepared soon after the act was passed but it was never approved, to our knowledge, by the Administrator and the copy that we have is marked administratively confidential. There was a further document prepared in 1974 which was never approved by the Administrator. We heard

today hopefully the document will be out soon.

There have been significant conflicts in resolving the problems of aircraft-airport noise. We have some recommendations with respect to this area because we feel that perhaps FAA needs to give further attention to the regulations, 11 of them so far, which have been proposed by EPA. One of these was fully adopted, two were partially adopted, four were rejected, and there are four others on which no action has been taken to date. We think that within a reasonable time as mentioned in the act, should be further determined, so that some feedback is given to EPA as to when or whether these particular regulations will be adopted or whether they will be modified or rejected. There has been some improvement. The FAA, as you know, has developed a retrofit regulation and we think that there is room for more. With respect to the matter involving penalties, for violating the interstate motor vehicle regulation; we feel that because of the fact that the act only specifies criminal penalties, the regulation has not been adequately enforced. I think there is agreement that what we need here is civil penalties to make it easier to go after the violators. As you know, it does take special effort to prove a criminal case and I think the civil route would be preferable. The actions that have been taken are significant, to some extent at least. The regulations that have been issued will impose some limitations on the growth of noise until new product noise standards are developed and implemented. Research has been somewhat identified with respect to the effect that noise has on the public health and welfare.

As mentioned earlier, EPA has developed 11 aircraft-airport abatement proposals for FAA, and there have been some model State and community ordinances developed which have been useful in developing noise controls at State and local levels.

This in brief is what my statement conveys and we will be glad to respond to questions.

[Mr. Eschwege's prepared statement follows:]

STATEMENT OF HENRY ESCHWEGE, DIRECTOR, COMMUNITY AND ECONOMIC DEVELOPMENT DIVISION, GENERAL ACCOUNTING OFFICE

Mr. Chairman and members of the subcommlttee: We are here today at your invitation to discuss our March 1977 report to the Congress on the Implementation of the Noise Control Act of 1972 titled "Noise Pollution—Federal Program to Control it has been Slow and Ineffective." My statement will highlight the findings, conclusions, and recommendations included in that report.

In response to the basic question of whether the Federal Government's Nolse Program has been working smoothly, we have to report to you Mr. Chairman that it has not. After more than 4 years, Implementation of the Noise Act has been slow and, in some cases, Ineffective. I do hasten to add that some actions

taken have been significant in addressing the noise pollution problem.

To date, only four noise emission standards have been issued under the act and these were many months late. Little progress has been made in issuing final aircraft/airport noise reduction regulations. Implementation of certain sections of the act, such as labeling, technical assistance, and research coordination, has received low priority by the Environmental Protection Agency and therefore, not much has been accomplished in these areas.

Our report recommended that the appropriate Congressional committees or subcommittees hold oversight hearings to evaluate past performance and provide guidance for future activities and we are pleased that this subcommittee

is exploring some of these problems.

About 13 million Americans are living in places where noise from cars, buses, trucks, airplanes, construction equipment, and kitchen gadgets may be harming their health. An estimated 16 million people in the United States suffer from some degree of hearing loss directly caused by noise. Furthermore, an estimated 100 million people reside in areas where the average noise level exceeds the level which the Environmental Protection Agency says is clearly identified with marked annoyance.

The Noise Control Act of 1972—the first comprehensive noise control legislation passed by Congress—was designed to eliminate excess noise in the design stage of a wide variety of new consumer products. The objectives of the act are to "promote an environment for all Americans free from noise that jeopardizes their health or welfare" and "to establish a means for effective co-

ordination of Federal research and activities in noise control."

The Noise Act directs the Environmental Protection Agency (EPA) to: Coordinate all Federal programs relating to noise research and noise control and report to the Congress on the status and progress of Federal noise control

activities.

Publish criteria identifying the effects of noise and provide information on

the levels of noise necessary to protect the public health and welfare.

Identify major sources of noise and prescribe and amend standards limiting the noise-generating characteristics of any product or class of products identified as a major source of noise.

Prepare a comprehensive report on the problem of aircraft/airport noise and submit regulatory proposals to the Federal Aviation Administration for con-

trol of aircraft/airport noise.

Require manufacturers to label products which (1) emit noise capable of adversely affecting the public health or welfare, or (2) are sold wholly or in part on the basis of their effectiveness in reducing noise.

Conduct and finance research on the psychological effects of noise and provide technical assistance to State and local governments on the various methods of noise control.

Promulgate regulations limiting the noise generated from interstate rail carriers and interstate motor carriers.

Today we would like to comment on the following problems presented in our report.

. The slow implementation of the Noise Control Act.

Ineffective efforts by EPA to coordinate the Noise Research and Control Programs,

The need for Development of a Comprehensive Noise Abatement Strategy, and Conflicts in resolving the Problems of Aircraft/Airport Noise Pollution.

#### SLOW IMPLEMENTATION OF THE NOISE ACT

Under the act, EPA is responsible for (1) issuing noise emission standards for new products and for railroads and interstate motor carriers, (2) requiring the labeling of products which can adversely affect the public health and welfare, and (3) providing tehnical assistance to State and local Governments.

Our review showed that little has been accomplished in carrying out some of these responsibilities. Where action has been taken, the implementation has

been very slow.

With regard to new products, EPA has identified eleven major sources of noise—portable air compressors, medium and heavy duty trucks, wheel and track loaders, wheel and track dozers, truck refrigeration units, truck-mounted solid waste compactors, motorcycles, buses, power lawnmovers, pavement breakers, and rock drills.

Final regulations have been issued for only two of these—portable air compressors and medium and heavy duty trucks—and these were issued over 1

year late and will not become effective until 1978.

The act specifically required EPA to publish proposed noise emission regulations for railroads and motor carriers engaged in interstate commerce within 9 months after the date of enactment. In both cases, final regulations were to be issued 90 days after proposal. Regulations for these 2 noise sources were issued late—12 months for motor carriers and over 2 years for railroads. The Federal Highway Administration is not seeking prosecution of violators of the regulation controlling noise on interstate motor carriers because the act provide for criminal penalties rather than civil penalties. In our report we recommended that the act be amended to provide for civil penalties.

There is some difference of opinion between the Department of Transportation (DOT) and EPA regarding the effectiveness of the noise regulation on interstate railroads in that it does not apply to railroad yards. The association of American Railroads flied suit on April 13, 1976, in the U.S. Court of Appeals for the District of Columbia Circuit, requesting a judicial review of the railroad regulation on the basis that it did not adequately provide for national uni-

form treatment of the Railroad Industry.

The act provides that EPA require any product emitting a noise capable of harming the public health or welfare be "labeled" to indicate its noise level. EPA has issued no final regulations for labeling any products at this time. The labeling program has been given a low priority and has received minimum

resources

EPA is authorized to provide technical assistance to State and local governments to facilitate their development and enforcement of comprehensive noise standards. Such assistance is to include advice on training personnel, selecting and operating noise abatement equipment, and preparing model noise legislation. EPA has also placed low priority in the technical assistance area. However, EPA officials have told us they realize the burden of the Nation's noise control efforts will eventually fail on State and local governments and that although the Office of Noise Abatement and Control has not been too effective in this area, greater emphasis will be placed on technical assistance in the near future.

### EPA EFFORTS TO COORDINATE THE NOISE RESEARCH AND CONTROL PROGRAMS OF THE FEDERAL GOVERNMENT HAVE NOT BEEN EFFECTIVE

There are 11 agencies with significant involvement in noise control within the Federal Government. Under the 1972 Act the Congress charged EPA with the responsibility for coordinating the noise research and control programs of all Federal agencies. These 11 agencies expended about \$170 million for noise research from fiscal year 1973 through fiscal year 1975.

Our review has shown that EPA has not been effective in promoting coordination. The majority of agencies contacted told us that coordination of the Federal Noise Control Program has not been effective since EPA assumed the

responsibility.

To discharge its legislative mandate to coordinate Federal Agency Noise Research. Development, and Demonstration Activities, EPA established four interagency noise research panels in February 1974. In addition to exchanging information, the panels were to (1) review and assess the current state of technology, (2) review and assess the status of research and technology development, (3) prepare recommendations concerning ongoing research activities, (4) recommend noise research programs and projects and methods for their accomplishment, (5) prepare reports on the status and/or progress of ongoing noise research activities, and (6) consider scientific and programmatic advice from other sources. The four research panels established were aircraft, machinery, noise effects, and surface vehicles.

EPA has stated that these fonr panels were to provide the mechanism for coordinating the noise research activities of the Federal Government. Howver, EPA officials and officials from the other agencies on the panels have told us the panels have not been effective. In fact, the panels first met in early 1974 and then were inactive for over 2 years. The panels were reactivated in

the latter part of 1976.

In June 1975 EPA issued its report on the status and progress of Federal activities on noise research and noise control, as required by the act. The report, according to EPA and other agency officials, does not meet the requirements of the act because it does not adequately assess the contributions of those programs to the Federal Government's overall efforts to control noise. Officials in the Office of Noise Abatement and Control told us the report is essentially an inventory or library of information, and therefore does not constitute an assessment, as called for in the act. EPA officials told us, however, that they plan to update the status report and include the required assessment.

EPA is authorized to conduct research on the effects, measurements, and control of noise. However, EPA's expenditures for noise research have declined from about \$545,000 in fiscal year 1975 to \$45,000 in fiscal year 1976. EPA did not request funds for noise research in fiscal years 1977 or 1978. Recently, EPA's Office of Research and Development published a 5-year plan for its total research and development activities. No consideration was given to noise research in this plan.

In commenting on our report DOT stated that the noise research budget for the entire Federal Government had decreased since enactment of the Noise Act because other agencies have looked to EPA for leadership and guidance.

#### NEED FOR DEVELOPMENT OF A COMPREHENSIVE NOISE ABATEMENT STRATEGY

Two months after the Noise Act was passed EPA prepared a strategy study for implementation of the act. This document placed primary emphasis on developing standards for the control of major noise sources in the surface transportation and construction areas, producing those documents with mandatory deadlines, producing aircraft/airport proposals for submission to FAA, and publishing the Interstate Carrier Regulation. Areas such as technical assistance, Federal program coordination, and labeling were given lower priority in the near term.

Early in 1974 EPA officials recognized that the original strategy study needed to be updated and a revised strategy was prepared in July 1974. EPA officials have told us, however, it was not as comprehensive as it should have been, and therefore was never approved by the EPA administrator. Although EPA recognized the need for a more Comprehensive Noise Abatement Strategy, none has been finalized to date.

In our report we recommended that the Administrator, EPA, direct that an overall strategy for the Noise Control Program be prepared so that all provisions of the Noise Control Act are implemented in a balanced coordinated manner.

EPA commented that a draft strategy had been circulated for public comment in November 1976 and that the strategy would be redrafted in the Spring of 1977.

We believe the overall Noise Program Strategy that has been drafted and submitted for comemnt is a good first effort in the development of a unified, National effort to reduce noise pollution. This strategy should be finalized as soon as possible so the provisions in the 1972 Act can be implemented effectively.

#### CONFLICTS IN BESOLVING THE PROBLEMS OF AIRCRAFT/AIRPORT NOISE

In 1968 the Congress passed Public Law 90-411 that added to the Federal Aviation Act of 1958 a new section entitled "Control and Avatement of Aircraft Noise and Sonic Boom." This law gave FAA responsibility for "... present and future relief and protection to the public health and welfare from aircraft noise and sonic boom..." consistent with safety, economic reasonableness, and technological practicability. The Noise Control Act extended the provisions of Public Law 90-411 and further defined the policy of the U.S. Government regarding Aircraft Noise Control.

Aithough aviation regulatory authority rests with the Federal Aviation Administration, under the act the Evironmental Protection Agency is mandated to play a significant role in the aviation regulatory process. The act required EPA to study the adequacy of FAA flight and operational noise controls; and submit recommendations for regulations to FAA which EPA deemed necessary

to protect the public health and weifare.

It is clear that a coordinated joint effort between the two agencies is necessary if any progress is to be made in abating aircraft noise. However, neither the FAA and the EPA feel the other is effectively implementing the aircraft noise provisions of the act. FAA believes the EPA proposed recommendations center too much on safety-related problems, and do not adequately cover the health and welfare aspects of noise. EPA officials on the other hand, told us they have been dissatisfied with the cooperative efforts of FAA. EPA believes that the aviation noise problem is essentially the same as when the act was passed and they see little progress being made during the next few years.

During the period from December 6, 1974, to October 22, 1976, EPA submitted 11 proposed regulations to FAA. These deait with such matters as propeller-driven small airplanes, minimum aititudes, retrofit, present and future supersonic civil aircraft, minimum flaps landing approach, and the airport

regulatory process.

At the time we submitted our report to DOT for comment FAA had not taken final action on any of the EPA proposals. Since then, however, actions have been taken on 7 of the 11 proposals. It adopted the proposed minimum flaps approach, and portions of the propeller-driven small airplanes and the retrofit proposals. FAA has decided not to issue four of the proposals and no further action has yet been taken on the remaining four.

Although FAA is required by the act to adopt, modify, or reject EPA's proposed regulations within a reasonable time, it has sometimes taken FAA 2 years to take such action. Therefore, we recommended in our report that the act be amended to require that FAA accept, modify, or reject EPA proposed regulations within a specified time and if modified or rejected FAA should

provide the reasons for such action.

#### LACK OF COORDINATION

Our analysis of coordination between the two agencies showed that serious problems have hindered the development of Aviation Noise Control Regulations. An example of the lack of coordination concerns the efforts to develop an air-

port noise regulation.

In July 1975, FAA published a solicitation of public comment on potential directions for an FAA airport noise policy in the Federal Register. EPA officials told us they had no prior knowledge that FAA was going to publish this notice. A July 11, 1975, Memorandum by EPA's Deputy Assistant Administrator for Noise Control Programs, concerning the lack of coordination with FAA regarding this notice, stated in part:

"I can only view this notice (FAA's airport proposals) with no prior consultation with EPA, as being one more indication that the FAA has no intention of cooperating and coordinating with EPA on actions relative to aviation noise abatement. In fact, the FAA action, unilateral and not in concert with EPA, could be viewed as being an effort on the FAA's part to build a position

to counter EPA's proposal."

Although recent correspondence indicates some improvement in the relationship between the two agencies in dealing with the aviation noise problem, EPA's response to our report indicates that the problem still exists. There is an obvious fundamental difference of philosophy on how best to control aircraft noise and whether the actions taken have been effective. In EPA's view, FAA regulations apply only to the noise levels being already achieved by in-

use aircraft, rather than requiring more stringent standards that could be achieved by incorporating new technology which has been demonstrated and is available. Until these fundamental policy differences are settled, progress in

the aviation noise area is not likely to occur.

Mr. Chairman, in spite of all the problems we have discussed concerning the slow implementation of the Noise Control Act and the lack of coordination, it is important to recognize that some of the actions taken by the environmental protection agency have been significant in addressing the noise pollution problem. For example:

The Noise Control Regulations on Interstate Motor Carriers and Rail Carriers will impose limits on the previously uncontrolled growth of these noise sources until new product noise emission standards can become effective.

Research efforts have resulted in identifying the kind and extent of effects of noise on the public health and welfare, and provided the framework for assessing, for the first time, the National impact of noise from various types of products.

EPA's 1973 "Report on Aircraft/Airport Noise," mentioned earlier, identified major actions which EPA believed the Federal Government should take to help solve the aviation noise problem. Subsequently the EPA developed and sub-

mitted 11 aircraft noise abatement proposals to the FAA.

A model state ordinance and a model community ordinance has been prepared which will be useful in the development of noise control ordinances or legislation suited to State or local needs and conditions.

Mr. Chairman, this concludes my prepared statement. We shall be glad to respond to any questions you or members of the subcommittee may have.

Mr. Rooney. Thank you very much, Mr. Eschwege.

I would like to commend GAO on the outstanding report that has been prepared. Certainly it reflects that much needs to be done by the committee with respect to EPA. I would like to commend you for this report. How did you conduct the audit of the noise program?

Mr. Eschwege. Mr. Chairman, I might start off by telling you that we have a presence of GAO staff at the Environmental Protection Agency which provides oversight over a number of the major programs that the EPA handles. We are selective in the programs we look at. One of the many criteria that we use is when a new program has been legislated by the Congress we go in after a while to see how effective this program is working. So, Mr. Fultz went into the noise area over 1 year ago with some staff and became immersed in what is going on at EPA and started asking a lot of questions. We also went to some of the other agencies. As you know, there are over 30 agencies that are somewhat involved in noise control, some more than others. So, we went to selected agencies to find out how they viewed the program. We looked at the research activity and asked a lot of questions and then developed this report.

Mr. Rooner. Why was the implementation of the noise program so slow in your opinion? Was it lack of management, lack of funds,

or the structure of the act?

Mr. Eschwege. I think first of all, I don't agree that there was a full strategy developed. I am not sure that we have one completed today as to how best to approach it. Second, there was a question of management because EPA, for instance, in the air transportation area, did not have the full responsibility for promulgating and enforcing the regulations. However, it did have, under the act, the responsibility to coordinate. There was difficulty, as there is in many of these cases in the government, to properly coordinate this particular activity. We talked about the panels which we feel should not have been inactive all this time. This again, I think, is management.

I am sure they didn't have all the funds that they would like to have but because they didn't move in the area of identifying adequately what research needed to be done, other agencies, in fact, reduced their research because they felt that there was no overall guidance and they didn't want to go ahead in the wrong direction in doing research work.

Mr. Rooney. What, in your opinion, do you think we can do to get

a quicker pace in the implementation of the Noise Act?

Mr. Eschwege. I think that probably they do need some more staff to properly implement the Noise Act more quickly but that is not the only thing they need. I think it is a commitment that you have to have at the highest levels, that agencies need to work together to follow specific policies that are laid out, and then make sure that the personalities involved are conducive to carrying out that particular commitment. I am not sure it is all organization that will do it. As we find in other work that we do, if you have the people in there who are committed to work together amongst Federal agencies you can do the job and if you can get some overall guidance from OMB and maybe even the White House, I think you can get a better job done.

Mr. ROONEY. We got into the hostility between the agencies. Do

you think that hostility still exists?

Mr. ESCHWEGE. I think it has been mitigated some, but it still, I believe, is an obstacle to getting the job done as quickly as I am sure everyone wants it to be done.

Mr. ROONEY. So it is still there?

Mr. Eschwege. Yes; some of them are philosophical, as was mentioned earlier in the aviation area.

Mr. Rooney. If a draft noise strategy existed in 1973, in your

opinion why has not a final agency strategy been approved?

Mr. Fultz. Our report shows that there was some disagreement between the Assistant Administrator and the Deputy Assistant Administrator of the noise program. The report contains numerous memorandums on the discussion of the lack of strategy, and the need for that strategy. There did not seem to be a meeting of the minds between the two. A draft was prepared in 1974; however, it was not finalized. It was not as comprehensive as it should have been, therefore it was not approved and distributed by the agency.

Mr. Rooney. Why did that not come out when they changed de-

puty administrators?

Mr. Fultz. Apparently Mr. Elkins felt that the strategy that was prepared in 1974 was not as comprehensive as it should have been. I have reviewed that strategy and I would agree that the strategy they developed in July 1974, was not nearly as adequate as the one that was subsequently prepared and submitted for public comment in November 1976.

Mr. Rooney. So, you are satisfied with the strategy that has been

presented in 1976?

Mr. Fultz. Yes; I think the one that was circulated for public comment in 1976 is a good first effort.

Mr. Eschwege. I think what we have not seen yet are the responses

which have been received on their strategy document.

Mr. ROONEY. When do you think that will be presented so that this committee can review it?

Mr. Eschwege. We really have some doubts that it can be presented in the next 2 or 3 weeks but I guess the agency knows better than we right now.

Mr. Rooney. You are saying, then, a reasonable time is 3 or 4

weeks?

Mr. Eschwege. That is what the agency is saying. I am wondering whether they are able to deal with all these comments that quickly.

Mr. Fultz. In their response to our report, sir, the agency stated that the draft which was submitted for comment in November would be redrafted in the spring of 1977. They did not say when it would be finalized.

Mr. Rooner. In your opinion what do you think we, as a com-

mittee, should expect as a time frame?

Mr. Eschwege. I think you could expect it within the next 3 months. What I heard today is that all the comments are in and all they need to do is deal with them and get the final document out.

Mr. Rooner. I wonder if you could tell the committee the reasons the EPA gave you for cutting their noise research budget from \$45,000? What reasons did EPA give for not requesting any funds

for fiscal year 1977 and 1978?

Mr. Eschwege. I think their reason is that they felt that they needed to first find out from the other agencies what it is they are doing in the research area, what priorities should be assigned to the research activity in noise and, because they had this inactivity amongst these four panels, I think they are just grappling with this question now. You could possibly agree that it is not a good strategy to just charge and do reserach work in order to show some activity in that area. Our point is that this coordination should have taken place much earlier so that by this time you could know what the strategy for research should be and who should do what and under what priority system.

Mr. Rooney. Of the funds they spent for research, what projects

were they spent on !

Mr. Fultz. Various projects determining the health effects of noise, the detriment to the public health and welfare. It was more of a general type.

Mr. ROONEY. Did they get the information that they were really

after, in your opinion?

Mr Fultz. For what they intended, yes, I think they did. I think a lot of it was done to support their status report which was issued in July 1975.

Mr. Eschwege. We are not talking about very much money here,

as you know. It has stopped altogether in 1977, 1978.

Mr. Rooney. Are they adequately staffed?

Mr. Fultz. Who, sir?

Mr. ROONEY. EPA.

Mr. Fultz. The program people or ORD?

Mr. Rooney. The research.

Mr. Fultz. ORD currently has no one assigned to noise research, to my knowledge.

Mr Rooney. That is probably one of the reasons why they con-

tracted out 70 percent of their contracts.

Mr. Eschwege. I don't think the 70 percent is for research. The 70 percent is to support their regulatory activities.

Mr. KRUEGER. Part of which could be research.

Mr. Rooney. How do you feel about that 70 percent being con-

tracted out?

Mr. Eschwege. It all depends on how much control EPA maintains over these contractors, and this is one area that we have not looked at in great detail. We do mention in our report one situation where a contractor was engaged to help develop the labeling program and according to EPA this particular contract was not well designed and did not produce the results that they had hoped for.

Mr. Rooney. We have all these agencies and then we spend these millions and millions of dollars staffing them and then they contract out. I just think this is wrong. I think it is contrary to the will of the Congress and I think it is entirely at the expense of the taxpayer. You know we have that problem with the Commerce Department

and the Bureau of Tourism at the present time.

Mr. Eschwege, Yes.

Mr. Rooney. Your report criticizes the lack of coordination and cooperation between the 11 agencies involved in noise research and the EPA. What factors does GAO attribute to this lack of co-

operation?

Mr. Eschwege. I guess the one that we have already highlighted here and the one that we have looked at in particular is the different philosophies between FAA and EPA as to how far you should go in the regulating of aircraft where FAA seems to say, "Let us use the in-use technology," and EPA savs "We can do a little bit better and use the available technology," although it is not in use. There have always been some differences between OSHA and EPA with respect to the noise levels in working plants. OSHA says 90 and EPA uses the more stringent requirement of 85 decibels. They are looking at it from a different point of view and that is not necessarily bad so long as you come up with an acceptable solution. EPA is concerned, as we mentioned, with the health and welfare, FAA is concerned also with safety. Now, there is some dispute about that. FAA thinks EPA is getting too much involved in safety and EPA says they cannot just look at the health and welfare without being concerned about safety. So, we get into these kinds of arguments.

Mr. Rooney. I touched on the AAR's seeking an injunction against EPA noise emission standards issued under section 18 of the act. Do

you think the yards should be regulated?

Mr. Eschwege. This is, of course, in the courts right now. I am not

sure I should really comment on this.

Mr. Rooner. If you feel that way it won't be necessary. Are there further questions?

Ms. Mikulski. No questions. Thank you.

Mr. Rooney. Thank you very much. Again, Mr. Eschwege, I would like to commend you and the staff for a very excellent report.

Mr. Eschwege. Thank you.

Mr. ROONEY. I trust you will continue to monitor this program.

Mr. Eschwege. Yes. sir.

Mr. Rooney. This will conclude our hearings until Thursday at 10 unless the full committee meets at 10 and in that case we will continue at 2 in this room.

[Whereupon, at 4 p.m., the subcommittee adjourned, to reconvene

at 2 p.m., Thursday, April 21, 1977.]

### EXTENSION OF AUTHORIZATIONS UNDER THE NOISE POLLUTION CONTROL ACT OF 1972

#### THURSDAY, APRIL 21, 1977

House of Representatives,
Subcommittee on Transportation and Commerce,
Committee on Interstate and Foreign Commerce,
Washington, D.C.

The subcommittee met at 2 p.m., pursuant to notice, in room 2218, Rayburn House Office Building, Hon. Fred B. Rooney, chairman,

presiding.

Mr. ROONEY. Today is the second day of hearings on EPA's implementation of the Noise Control Act of 1972. Today's hearings will focus primarily on the findings in the GAO report relating to transportation noise and what is being done to abate it.

The first witness is Mr. W. H. Close, Director, Office of Noise Abatement, Department of Transportation, Mr. Close will be accompanied by Mr. Charles R. Foster, Director of the Office of Environ-

mental Quality, Federal Aviation Administration.

I might say, Mr. Close and Mr. Foster, I wish you could have been here the day before yesterday to hear testimony that was delivered by Mr. Elkins and the problems that they have with your department with respect to cooperation on noise abatement.

Mr. Close. We were here on Tuesday.

Mr. Rooney. Perhaps you can either refute or make some kind of comment on what was said about the failure of both agencies to involve themselves in closer relationships with respect to the noise problem You might proceed.

I might say that some of the other members of the committee presently are on the floor. We might be interrupted by a few votes

on amendments, but you may proceed.

STATEMENT OF W. HARRY CLOSE, DIRECTOR, OFFICE OF NOISE ABATEMENT, DEPARTMENT OF TRANSPORTATION, ACCOMPANIED BY JOHN E. WESLER, CHIEF, REGULATORY POLICY AND STANDARDS DIVISION; AND CHARLES R. FOSTER, DIRECTOR, OFFICE OF ENVIRONMENTAL QUALITY, FEDERAL AVIATION ADMINISTRATION

Mr. Close. Thank you, Mr. Chairman. I am W. Harry Close, Director of the Office of Noise Abatement of the Department of Transportation With me today are Mr. John E. Wesler, Chief, Regulatory Policy and Standards Division of my office, and Mr. Charles R.

Foster, Director, Office of Environmental Quality, Federal Aviation Administration.

It is a pleasure to appear before you to discuss the recent report of the Comptroller General of the United States on Federal programs

to control noise pollution.

As you know, the Department of Transportation and the Federal Aviation Administration have been active in the noise abatement field for a number of years. The first concerted Federal Action to attack the noise problem occurred in 1966, when President Johnson assigned to his office of Science and Technology the responsibility for developing and coordinating an interagency aircraft noise abatement and sonic boom program. This, of course, was prior to the formation of the Department of Transportation or the U.S. Environmental Protection Agency, but the FAA was a key participant in

the Office of Science and Technology deliberations.

In 1966 Public Law 89-670 established the Department of Transportation and, although it did not include regulatory authority for noise, it did direct the Secretary of Transportation to undertake noise abatement research with particular attention to aircraft noise. The Department created an Office of Noise Abatement, which I now direct, with responsibility for research, development, and coordination of DOT noise alleviation programs. In addition, in September 1967 the President's Office of Science and Technology transferred to the Department its aircraft noise coordinating responsibilities. I might add that at that time Mr. Foster was Director of the Office of Noise Abatement and I succeeded him.

The Department's first legislative mandate to protect the public against unnecessary aircraft noise and sonic boom was provided in July 1968 by Public Law 90-411, which added section 611, entitled "Control and Abatement of Aircraft Noise and Sonic Boom," to the Federal Aviation Act of 1958. It authorized the FAA Administrator, in consultation with the Secretary, to prescribe aircraft noise standards and regulations to afford present and future relief and protection to the public from unnecessary aircraft noise and sonic boom. The 1968 amendments to the FAA Act also stated that the regulations were to be consistent with the highest degree of safety, economically reasonable, technologically practicable and appropriate for the particular type of aircraft.

In 1968, in anticipation of the enabling legislation, FAA had been working diligently to develop viable noise standards for the upcoming family of wide-body jet transport aircraft. The notice of proposed rulemaking to establish specific noise level limits at specified measuring points under specified flight procedures was published on January 11, 1969, just 6 months after the President signed Public Law 90-411. The final rule, establishing a new part 36 to the Federal Aviation Regulations, was issued in November 1969 and became effective on December 1, 1969. That is some 17

months following enactment of the legislation.

I also should add to that no environmental impact statement, consultations, et cetera, were required then and the FAA had been work-

ing on the proposal before the act was passed.

I am sure that you are well aware of the significantly lower and less annoying sound levels of the 747, DC-10 and L-1011 wide-body

aircraft, which comply with the FAR part 36 noise limits. And we are continuing to examine the technological feasibility of even

quieter standards.

These lower levels of noise that have been established were not determined arbitrarily but rather through a lengthy process of Government and industry research and development on measurement techniques as well as on the feasible noise control opportunities for the yet-to-be-certificated new generation of super jets. Most of the public believed that these larger aircraft—the 747 is twice the size and weight of the 707—would be louder and more annoying than those already operating in 1969. But that was not the case. The authority to set noise standards to provide relief for the public produced the opportunity to introduce newly developed engine and noise control technology which resulted in aircraft half as noisy as their predecessors.

It should be noted, for comparison, that the military airplane development program which fostered the engine and, in the case of the 747, the airframe technology was the C-5A. Noise levels of the B-747 and DC-10 civil airplanes are markedly lower than the contemporary C-5A airplane because of FAA regulations and pre-

cursor Government-industry task force efforts.

A comparison of noise levels of these aircraft and the older 707's is shown on attachment 1. Also shown are the maximum levels stipulated in the FAA regulation promulgated in 1969 with which the new civil aircraft comply. The differences between the military aircraft and the 747/DC-10 or the older aircraft and 747/DC-10 are apparent.

If we may take a moment to look at that first attachment——Mr. Rooney. The attachment, without objection, will become part

of the record.

Mr. Close. Thank you

[Attachment 1 referred to follows:]

ATTACHMENT 1

AIRCRAFT NOISE LEVELS AT 14 CFR 36 MEASUREMENT POINTS

	747-200	DC-10-10	C-5A 1	707-300B
Weight (pounds)	775, 000	440, 000	732, 500	332, 000
Actual noise levels (in effective perceived noise decibels):				***
Takeoff point	107	98	121	113
Sideline point	98	95	114	108
Approach point	106	100	124	108 120
FAR-36 noise timits (in effective perceived noise decibets):	200		'	
Takeoff point	108	106	108	103, 5
Sideline point.	108	107	108	106. 5
Studille hourt				
Approach point	108	107	108	106. 5

<sup>&</sup>lt;sup>1</sup> Military aircraft, excluded from compliance with FAR, pt. 36. <sup>2</sup> Civit aircraft, certificated prior to effective date of FAR, pt. 36.

Mr Close. The four types of aircraft are listed across the page and, for comparison purposes, the maximum gross weights of those aircraft are included. You will note, for example, that the 747 and the military C-5A airplanes are similar in weight, with the 747 being somewhat heavier. These were actually competitive airplane designs in the military program.

Mr. Rooney. Wasn't the C-5A grounded?

Mr. Close. It has had some difficulties along the line, yes, sir. It

is now back in operation.

The noise levels for the four airplanes are noted for the FAA procedure measurement points at takeoff, along the sidelines during takeoff and at a measuring point on the approach short of landing.

All of these were measured in the same way, the airplanes flying according to their best capabilities. You can see that the C-5A, for example, has 121 EPN dB at takeoff as compared to the 747 at 107. There is 14 dB difference between them. Other comparisons can be made across the page.

The bottom part of this chart is the noise level limits with which these airplanes would have to comply according to FAR part 36. You can see that the 747 and the DC-10 do comply whereas the C-5A, which is the military airplane, is not subject to compliance, and the 707 was built well before these standards were in existence.

The differences are evident.

Subsequent amendments to FAR part 36 have required that new production aircraft of the older, noisier types, such as the 707, be made to comply with the FAR part 36 noise limits. Achievement of these low levels by new airplanes of the 707, DC-8, 727, DC-9 variety had been shown to be technically possible, however, through FAA and NASA research. 727's, DC-9's and so forth are now being built to these standards.

FAA has now required that all operating civil aircraft in the subsonic jet transport category comply with the same noise limit

through a phased compliance regulation.

Mr. Rooney. Where are you in your statement?

Mr. Close. At the top of page 5, sir.

Mr. Rooney. Do I have the same statement?

Mr. Close. I have inserted some additional clarifying comments. Small propeller-driven aircraft have been brought under certification noise controls, sonic booms from all civil aircraft are prohibited over U.S. territory and flight procedures have been introduced to abate noise around airports as a result of FAA regulations written under authority of the FA act, as amended by Public Law 90-411.

The list of regulatory steps initiated by the FAA under its authorities is shown in the tables of attachment 2 appended to this statement. I have included the advanced notices—ANPRM's—and notices of proposed rulemaking—NPRM's—along with the final regulations to reflect the various steps of the process. The final regulations are noted in the attachment by the bold type.

[Attachment 2 referred to follows:]

#### ATTACHMENT 2

#### FAA AIRCRAFT/AIRPORT NOISE CONTROL ACTIONS

#### SOURCE NOISE CONTROLS INITIATED BY THE FAA

January 11, 1969—NPRM 69-1: Proposed Noise Standards for Aircraft Type Certification.

November 18, 1969-14 CFR 36; Noise Standards; Aircraft Type Certification, effective December 1, 1969.

August 4, 1970—ANPRM 70-33: Proposed Civil Supersonic Aircraft Noise Type Certification Standards.
November 4, 1970—ANPRM 70-44: Proposed Civil Airplane Noise Reduction

Retrofit Requirements.

July 25, 1972—NPRM 72-19: Proposed Noise Standards for Newly-Produced Airplanes of Older Type Designs.

January 24, 1973—ANPRM 73-3: Proposed Civil Airplane Fleet Noise (FNL)

Requirements.

October 10, 1973—NPRM 73-26: Proposed Noise Standards for Small Propeller-Driven Airplanes.

October 26, 1973—Amendment 2 to 14 CFR 36: Noise Standards for Newly-

Produced Airplanes of Older Type Designs, effective December 1, 1973.

December 28, 1973—ANPRM 73-32: Proposed Noise Standards for Short-Haul

March 27, 1974—NPRM 74-14: Proposed Civil Aircraft Fleet Noise Requirements.

January 6, 1975—Amendment 4 to 14 CFR 36: Noise Standards for Small

Propeller-Driven Airplanes.
November 5, 1975—NPRM 75-37: Proposed Noise Reduction Stages and

Acoustical Change Provisions.

August 19, 1976—Amendment 5 to 14 CFR 36: Acoustical Change Approval Procedures.

October 28, 1976—NPRM 76-21: Proposed Changes to Aircraft Noise Measure-

ment and Evaluation Specifications.

October 28, 1976—NPRM 75-37C: Supplemental Proposed Noise Reduction Stages.

December 23, 1976—Amendment 136 to 14 CFR 91: Phased Compliance Requirement for all Civil Aircraft with Noise Standards of 14 CFR 36.

March 3, 1977—Amendment 7 to 14 CFR 36: Increased Stringency of Noise Standards for Aircraft Type and Air-Worthiness Certification.

#### OPERATIONAL NOISE CONTROLS INITIATED BY THE FAA

April 10, 1970—NPRM 70-16: Proposed Prohibition of Civil Aircraft Sonic Booms.

February 28, 1972—FAA Order 7110.22A. Arrival and Departure Handling of High-Performance Aircraft (Keep-Em-High Program).

February 28, 1972—Advisory Circular 90-59, Arrival and Departure Handling of High-Performance Aircraft.

of High-Performance Aircraft.

March 28, 1973—14 CFR 91: Civil Aircraft Sonic Boom, effective April 27, 1973.

January 18, 1974—Advisory Circular 91–39, Recommended Noise Abatement Takeoff and Departure Procdure for Civil Turbojet-Powered Aircraft.

March 26, 1974—ANPRM 74-12: Proposed Two-Segment ILS Noise Abatement Approach.

July 9, 1974—Advisory Circular 91-36A, VFR Flight Near Noise Sensitive Areas.

#### AIRPORT OPERATIONS NOISE CONTROLS INITIATED BY THE FAA

July 9, 1975—Alternative Airport Noise Policy.

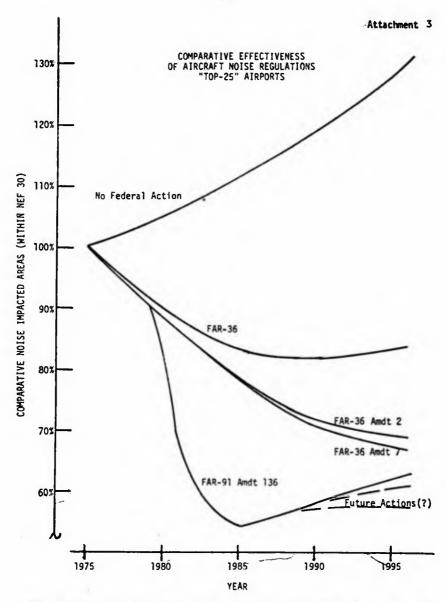
November 18, 1976—DOT/FAA Aviation Noise Abatement Policy Issued.

Mr. Close. I think you can see, Mr. Chairman, that this is a quite extensive list of activities initiated by the FAA in this fairly short time period from 1969.

While this list of actions is not a completed program, I believe that it represents an impressive array of actions in this highly complex arena, where safety, technology and cost are factors which must be thoroughly evaluated before mandating change—no matter how great the need may be for relief from unnecessary aircraft noise.

The full effects of these regulations have only begun to be evidenced. As the airlines comply with the regulations applicable to the older, noisier, airplanes, we will see substantial reductions in the number of households adversely affected by aircraft noise. The chart appended to this statement, attachment 3, illustrates the projected changes in noise impacted land area around the top 25 airports in the country as a result of expected growth in air traffic coupled with the effects of key FAA noise regulations.

[Attachment 3 referred to follows:]



Mr. Close. I might take a moment to explain this chart, sir. We have taken 1975 as the base year, when, in fact, part of the benefit of the FAA regulations had already been realized. At our 100-percent level, we estimate that some 6 million people were adversely affected by aircraft noise at all of the civil, commercial airports around the country.

If we took the projected increase in air traffic over the years and used the mix of airplanes that were flying in 1975 and multiplied their numbers to meet that demand. The upper line would be the

expected result of growth in adverse impact in area and population with time.

As a result, however, of the FAR part 36 requirement for new aircraft, new-type aircraft, to meet these lower limits, we expect the impact to continue to reduce as shown by the second line down there marked FAR-36. This will reduce, by 1990, the impact to some 82 percent of our base year of 1975.

Mr. Rooney. Where would the SST come on this chart?

Mr. Close. This is not factored in because final regulations have not been written for that.

Mr. Rooney. Where do you think the SST would come on this

chart?

Mr. Close. It is factored in here sort of as a marginal effect. The number of airplanes of the subsonic category are so great that the perturbation of the few Concordes that we have right now would not change these lines much more than the breadth of a pencil mark. If we had many noisy airplane oprations in the supersonic category, then that would shoot these lines upward.

The next line downward, FAR-36, amendment 2, reflects benefits projected from the requirement that the future production, or the current production now, of older-type aircraft, 727's, DC-9's, to meet the part 36 limits would bring us down, in 1990, to some 72

percent of the base year exposure.

The lowering of the FAR-36 requirements for future-design airplanes is reflected by amendment 7 and, to the 1990 time frame, that will not have a great deal of significance; but, as time marches on, this will be a very strong controlling factor.

Then the big dip at the bottom which reduces the exposure to some 54 percent of the base year will be brought about by the replacement

retrofit program, or FAR-91, amendment 136.

Future actions perhaps to require more stringent new-type aircraft noise limits, operating procedures and so forth would result in further noise reduction as shown in the lower right-hand corner of the figure.

These future actions from the currently unregulated sources, steps taken to control noise at specific airports and future technological opportunities will undoubtedly lead to further reduction of noise

impacts around the airports.

All of the FAA and DOT regulatory and policy actions I have cited have been realized under authorities which existed prior to the passage of the Noise Control Act of 1972. All of these efforts have been initiated and culminated using the personnel and resources

available to the FAA and the DOT.

The Noise Control Act of 1972 did add a very strong and unequivocal national policy guidance which supported and accelerated the FAA initiatives in aircraft noise control. The Noise Control Act also added a second voice on the aircraft noise problem by vesting in EPA the authority to conduct an independent assessment of the FAA program and to independently propose aircraft noise regulations which the FAA is required to publish, consider and act upon.

The Noise Control Act added public health and welfare to the present and future relief charge given FAA in section 611 of the

FA act, and it added the requirement of consultation with the Administrator of EPA prior to promulgation of standards and regu-

lations on aircraft noise.

In accordance with the Noise Control Act, the U.S. Environmental Protection Agency conducted its study and evaluation of the FAA program and reported to the Congress in July of 1973. In that report, the EPA stated its intentions to utilize its authorities to propose aircraft noise regulations to the FAA. In the February 19, 1974, Federal Register EPA announced its intention to propose 10 regulations to FAA. In December of 1974 the first of the EPA proposals was delivered to the FAA. Attachment 4 lists the submissions to date from EPA under authority of section 7 of the Noise Control Act.

It should be noted for accounting purposes here, when the stated intention was to propose 10 and we have 11 listed, that the take-off procedure, the short takeoff and landing—STOL—aircraft and the vertical takeoff and landing—VTOL—aircraft regulation proposals initially listed by EPA have not been submitted, while the landing approach regulatory proposal was actually delivered in three separate proposals, the retrofit requirements regulations proposal was added to the fleet noise level proposal and two supersonic aircraft proposals were forwarded to the FAA by the EPA. So we go from 10 to 11 with 3 yet to be forwarded.

All of the EPA proposals were published in the Federal Register by the FAA within the 30-day period required by section 7 of the Noise Control Act. Public hearings were held by FAA on all of the EPA proposals within the 60-day period following publication, as

required by the act.

No further public action was taken on the EPA proposals until late in 1976, due in large measure to the existence of parallel FAA initiatives which preceded the EPA proposals—I think you can see that by comparing attachment 2 with attachment 4—and due also to the efforts leading to the development of the DOT-FAA aviation noise abatement policy statement issued on November 18, 1976. That policy statement set forth a clear Federal action plan to deal with the aviation noise problem and described the shared responsibilities among those involved in aviation. The issuance of this broad policy permitted the FAA to go ahead with several actions, including the complex replacement-retrofit program, and to respond to 7 of the 11 EPA proposals which it had received. These responses to EPA are noted in the final table attachment 5 of this statement. [Attachments 4 and 5 follow:]

#### ATTACHMENT 4

#### SOURCE NOISE CONTROL PROPOSALS SUBMITTED BY THE EPA

December 6, 1974—Noise Standards for Propeller-Driven Small Airpianes, published as NPRM 74-39, January 6, 1975.

January 28, 1975—Civil Fleet Noise Retrofit Requirements, published as NPRM 75-5, February 27, 1975.

January 28, 1975—Fleet Noise Level Requirements, published as NPRM 75-6, February 27, 1975.

February 27, 1975—Civil Supersonic Aircraft, published as NPRM 75-15, March 28, 1975.

January 13, 1976-Airplane Noise Requirements for Operation to and From an Airport within the United States (current supersonic aircraft), published as NPRM 76-1, February 12, 1976.

October 1, 1976-Noise Levels for Turbojet-Powered Airplanes and Large Propeller-Driven Airplanes, published as NPRM 76-22, October 28, 1976.

#### OPERATIONAL NOISE CONTROL PROPOSALS SUBMITTED BY THE EPA

December 6, 1974—Minimum Altitudes for Turbojet-Power Aircraft, published

as NPRM 74-40, January 6, 1975,
August 29, 1975—Minimum Flaps Noise Abatement Approach Procedure, published as NPRM 75-35, September 25, 1975.
August 29, 1975—Two-Segment VFR Noise Abatement Approach, published as

NPRM 75-35, September 25, 1975.

August 29, 1975-Two-Segment IFR Noise Abatement Approach, published as NPRM 75-35, September 25, 1975.

AIBPORT OPERATIONS NOISE CONTROL PROPOSALS SUBMITTED BY THE EPA

October 22, 1976—Airport Noise Regulatory Process, published as NPRM 76-24, November 22, 1976.

#### ATTACHMENT 5

#### SOURCE NOISE CONTROL RESPONSES TO EPA PROPOSALS

November 29, 1976—Decision not to prescribe Fieet Noise Level Requirement (EPA proposal of January 28, 1975).

December 23, 1976-Amendment 6 to 14 CFR 36: Noise Regulations for

Propelier-Driven Small Airplanes (EPA proposal of December 6, 1974).

December 23, 1976—NPRM 76-27: Proposed Noise Regulations for Agricultural and Fire Fighting Small Airplanes (EPA proposal of December 6, 1974).

#### OPERATIONAL NOISE CONTROL RESPONSES TO EPA PROPOSALS

November 29, 1976—Decision not to prescribe Minimum Altitudes (EPA proposai of December 6, 1974).

November 29, 1976-NPRM 76-26: Proposed Delayed Landing Fiap Noise

Abatement Approach Procedure (EPA proposals of August 29, 1975).

November 29, 1976—Amendment 134 to 14 CFR 91: Use of Minimum Certi-

ficated Landing Fiaps (EPA proposal of August 29, 1975).

November 29, 1976—Decision not to prescribe Two-Segment Approach Requirements (EPA proposals of August 29, 1975).

Mr. Close. It should be noted that the longest period between the submission of a proposal by EPA and a final action by FAA has been 24½ months. This time of response includes the time to publish, to hold public hearings, to assemble and analyze public comments and to prepare all factors for final decision. Four of the seven EPA proposals responded to were rejected and the reasons for those rejections were published in the Federal Register on November 29, 1976. The fleet noise level proposal was superseded by the FAA-proposed and -promulgated retrofit/replacement regulation. Several aspects of the EPA proposal on propeller-driven small airplanes were accepted and were proposed to extend to the previously excepted categories of agricultural and firefighting small airplanes. Delayed flap deployment and use of minimum certificated flaps have proceeded into subsequent rulemaking steps.

The foregoing illustrates a fact which is not well recognized in the Comptroller General's report—that is, that the implementation of the aviation noise control program has been aggressive and on a time frame not unlike that established in section 6 of the Noise Control Act for new product standards, with the notable exception of the supersonic aircraft noise problem which has been put to a trial program involving the Concorde. Further, this history of rulemaking initiated by the FAA illustrates that the Noise Control Act is not the entirety of the Federal program to control noise. A great deal has been accomplished by Federal agencies on the basis of authorities

quite separate from the Noise Control Act of 1972.

I would also like to add a comment regarding the Comptroller General's recommendation in his March 7 report that the Noise Control Act be amended to require the FAA to publish a notice of its intended action regarding each EPA proposal within a specified time. We would respectively request that the Congress defer any action on this recommendation pending administration proposals, which I have been apprised will be forthcoming, on streamlining the overall Federal regulatory process.

I might add, sir, that this book I have before me has copies of the most pertinent of the regulations which are listed in those tables.

You can see it is rather voluminous.

Before leaving the aircraft noise area it should be noted that the progress to date and benefits expected from regulations now on the books can be attributed, to a significant degree, to extensive and costly research programs performed by NASA, DOD, DOT, and industry-funded programs associated with new engines, airframes and flight procedures.

The stimulation and coordination of these efforts is essential to ensure the continuing flow of improved technology needed as a base

for further progress in the regulatory area.

As I mentioned at the beginning of this statement, the Department of Transportation was made responsible for the coordination of aircraft noise and sonic boom research in 1967. The interagency aircraft noise abatement program was formed with seven panels, each dealing with a particular discipline, and each panel was chaired, at the outset, by a member of the agency most involved with that discipline. Four annual reports were prepared and published on the Federal aircraft noise abatement plan and, I believe, the record supports the effort as being constructive from the standpoint of coordinating research, stimulating research where it would do the most good and providing a forum for industry as well as government planning in aircraft noise abatement.

As the GAO report indicates, this coordination, planning, and reporting activity was terminated in 1973 at the request of EPA in deference to their authority to coordinate all Federal noise programs. A hiatus followed. In my opinion, we have come to the point where clearly the hard problems of jet noise for both subsonic and supersonic engines, airframe noise on approach, propeller and piston engine exhaust, and wake turbulence are technological limitations to further reduction of noise. Further, these limits have to be rolled back with energy conservation and emissions reduction as added prerequisites along with the continuing needs of safety, eco-

nomics, and applicability to aircraft type.

Recently the EPA has reconstituted research coordination panels and has selected a chairman for each panel from the agency most

heavily engaged in that field of research. We applaud this effort but recognize that the task before the panels and other responsible

officials is large.

In the surface transportation noise control area, the Department of Transportation had an aggressive program prior to the passage of the Noise Control Act of 1972. The act provided clear channels for DOT research findings to be applied as Federal standards promulgated by EPA; and further, in sections 17 and 18, the act created responsibilities to be shared by EPA and DOT in the control of interstate carrier noise.

The stringent time requirements of the act directed that attention be focused first on the noise problems associated with the interstate carriers. DOT participated in the interagency task forces set up by EPA to pool limited expertise in these areas. DOT contributions were extensive in both areas because the majority of the work done theretofore had been carried out by DOT or with DOT involvement. The motor carrier standards were promulgated on time and included several innovations from DOT. The remainder of these standards derive from extensive experience of California and several other States in controlling highway noise.

In the railroad area no such State experience existed and differences of opinion as to the practicability of various standards caused and still give cause for differing views among DOT and EPA per-

sonnel, the railroads, as well as State and local officials.

In regard to the enforcement of standards and regulations issued under sections 17 and 18 of the act, we agree with the GAO that the current legislation, which applies only criminal sanctions, is not as effective as it could be if the Secretary were authorized to assess civil penalties for violations. Some clarifications of the preemption of standards and regulations issued under the authorities of these sections would also increase the effectiveness of enforcement.

We anticipate publication of the railroad compliance regulations in the very near future, as soon as we work out several items on

which we are presently consulting with EPA.

Our Bureau of Motor Carrier Safety—BMCS—inspectors tested 14,948 interstate motor carrier vehicles during the period between October 15, 1975, and December 31, 1976, in accordance with the noise standards issued by EPA: 2.76 percent of those vehicles failed to comply; and 3.3 percent complied within the margin of tolerance. These low levels of noncompliance are down significantly from initial noncompliance of 6.7 percent and 7.7 percent within the margin during 1974-75. I believe this is very good evidence of the effectiveness of the motor carrier noise standards. This question was raised in the hearings on Tuesday.

The Bureau of Motor Carrier Safety has also promulgated, under its existing authority, standards and regulations to protect the hearing of commercial vehicle drivers; that is, limits on noise permitted within the cab of the vehicle. Enforcement of those regulations during the period of January 1 through December 31, 1976, netted 2.94 percent violations and 4.5 percent complying within the margin of tolerance out of a total test sample of 12,154 vehicles. This also showed significant improvement over initial inspection results.

The research effort within the Office of the Secretary and the modal administrations has supported EPA rulemaking, DOT rulemaking, consensus standards development, and industry practices. We had trained some 450 State and local officials in the enforcement of highway vehicle noise standards before the interstate motor carrier regulations were written. We had demonstrated techniques to comply with the interstate standards and to achieve lower truck noise levels down to the lowest level proposed by EPA for medium- and heavyduty trucks—new product standard. Our extensive quiet-truck program served as a principal base of technology and cost for the EPA standard.

We are presently working together with joint funding to extend that research and demonstration project to develop lower cost approaches to the 80 decibel standard promulgated by EPA and additional information regarding technology application and cost to reach lower truck noise levels.

DOT has conducted extensive research on tire noise, tire safety, fuel economy effects of tire design, and user economics to support what we hope will be a near-term identification by EPA of tires as a major source of high-speed highway noise and, subsequently, regu-

lation of that source.

Our Federal Highway Administration has promulgated highway design noise level standards under authority of the Federal Aid Highway Acts of 1970 and 1973. These standards established the target for highway siting and construction as well as for certain existing highways. We have developed and continue to refine manual and computer techniques to predict "worst case" community noise—possibly 20 years after the highway is completed—when the highway is carrying maximum traffic. This work is subject to consultation with EPA under provisions of the Noise Control Act.

Our diesel engine and truck noise research has provided the technical basis for EPA's proposed regulation of diesel-powered construction equipment. In addition, in line with our responsibility to highway construction site neighbors, we perform research and hold workshops on highway construction noise control practices as well.

Our support of rapid transit construction and reequipping projects, through the Urban Mass Transportation Administration—UMTA—has produced remarkable progress in the achievement of low noise systems. The BART system in San Francisco was a leap forward in this regard. The Washington Metro is better yet and Baltimore promises still further reduction in noise. Concurrent UMTA research and demonstration contracts and grants are affording relief from this source of noise in established transit systems.

Our aim within the Department is to make transportation compatible with the environment. We use many tools to do this which predate or are not embodied within the new authorities of the Noise Control Act. Our efforts may not receive the same degree of attention as issuance of new product standards but we believe they are an integral part of the needed Federal noise control program.

We are not satisfied with our accomplishments to date but rather we continue to seek improvement in all aspects of our research,

demonstration, grant, and regulatory programs.

This concludes my prepared statement. I will be glad to answer

any questions.

Mr. Rooney. Thank you very much, Mr. Close. I have heard very much about your ability and your qualifications. You were described to me by several persons as the most qualified noise person in government After the testimony the day before yesterday, I would like your opinion on how qualified you believe the personnel are in the noise office of the EPA.

Mr. Close. Is that a question, sir?

Mr. Rooney. It is a laudatory statement on my part and now a question. I have heard from many sources that you are the real ex-

pert in noise.

Mr. Close. I would say that any new office with a Federal Government or a business would have growing pains and learning problems. I think the time requirements of the Noise Control Act placed on that new office tended to amplify the problems that one might

expect.

Mr. Rooner. They testified on Tuesday that there was a philosophical difference, I believe, of opinion between that agency and DOT as to how to regulate airport noise. EPA claims your noise regulations establish lower existing airplane noise levels and FAA does little to achieve future reductions in airplane noise. Do you have any comments?

Mr. Close. Yes, sir; I believe the attachment, the curve in the statement here, is very vivid evidence that the regulations issued by the FAA do a great deal and will bring a great deal more to relieve the problems around airports. The contention that these regu-

lations have done little I find totally supportable.

There is a difference in the charges made to the FAA and to the EPA within the Noise Control Act and the FAA Act in terms of what must be considered. On the one hand, on the part of the FAA, when they consider final rulemaking on a proposal, they not only have to consider need for relief of the public near the airport but they must consider safety, they must consider technology, applicability to type, economics and, of course, now we have emissions and so forth. When the EPA makes proposals to the FAA, under section 7 authority they are directed only to consider health and public welfare.

So there is a difference and a very big difference, sir, in the requirements of the law. If we consider only public health and welfare, we need not consider whether it is technologically and economically practicable to achieve the lower levels. This is really the essence of that statement which the EPA has made.

Some of the proposals that I think all of us would like to see come about simply are not supported by the available technology.

Mr. Rooney. EPA claims that their recommended regulations require best available technology rather than the FAA's requirement of current practice noise level. Why do your regulations not take into account best available technology?

Mr. Close. I think they do, sir.

Mr. ROONEY. Do you take into consideration the practicality of the lower levels?

Mr Close. Yes, sir; I think the record indicates a number of circumstances where rather large and sophisticated airplanes have had a great deal of difficulty in complying with FAA regulations on noise and to actually put what we could conceptualize as best available technology into a working piece of safe machinery to transport passengers around the world.

Mr. Rooner. Do you think the hostility between the FAA and the

EPA has improved in recent days?

Mr. Close. I think we have made a lot of progress in the surface transportation area. We don't have adversary proceedings in the shared responsibilities and shared interests in surface transportation. The law itself does establish adversary relationships in the aircraft area.

In the EPA proposals to FAA, which they must administer in public and open hearings, EPA is not well equipped to consider safety and these other things; so that the proposals are very much directed strictly to public health and welfare and this causes some problems.

I believe at hearings a couple of weeks ago someone said if you reversed the staffs and put the FAA people into EPA and the EPA people into the FAA, you would have the same problem because of the way the law is written.

Mr. Rooney. You have found that the area has improved with respect to aviation with the EPA and FAA?

Mr. Close. Surface transportation.

Mr. Rooney. The GAO report recommends that time limits be set on FAA consideration of EPA airplane noise recommendations. In

your testimony you oppose such limits, is that correct?

Mr. Close. Yes. sir: on two counts. One: The response of the FAA to date, I think, has been much better than the report reflects, especially if one puts that response in perspective with the time that the EPA has found necessary to respond on new product standards under section 6.

I believe that Mr. Elkins' testimony on Tuesday stated that the 2-vear requirement of section 6 simply was not enough to do the job.

We are responding to EPA proposals for new product or operational limits which involve a great deal more safety and intricacy in their implementation than would be the case for lawnmowers or trucks or construction equipment. Yet the response time has been within 24 months or 2 years.

Mr. Rooney. Why should you have unlimited discretion to set these recommendations that affect the health of millions of Ameri-

cans?

Mr. Close. The requirement is reasonable time.

Mr. Rooney. What is reasonable time?

Mr. Close, I would say 2 years. Now, in some cases 2 years will probably not be enough in order to perform the analyses necessary to put a very complicated proposal into practice.

Mr. Rooney. The committee will take a 15-minute recess for the

purpose of voting on this amendment.

Brief recess.]

Mr. Rooney. Mr. Close, under the Noise Control Act of 1972, I believe, the DOT is required to enforce EPA's regulations relating to interstate motor carriers. I wonder if you would explain to the committee how you enforce such regulations and the level of enforcement. Do you have enough personnel?

Mr. Close. The enforcement procdures that we have used, directly within the Department, rely on our Bureau of Motor Carrier Safety

field inspectors.

Mr. Rooney. How many do you have?

Mr. Close. It is in the 120 range across the country. There are numbers of limitations on how broadly that program can be effected. These people also have safety standards to enforce like brakes,

lights, driver qualifications, and so forth.

In the statement here, the 15,000 or so inspections a year of vehicles for noise and the increased rate of compliance do speak to the fact that it is producing results. The level of enforcement could be increased with increased inspectors since it is a matter of priorities.

Mr. Rooney. Have you attempted to increase your enforcement

staff?

Mr. Close. Each year there are, of course, discussions about the size of the BMCS field inspection staff In recent years the numbers have increased somewhat.

Mr. ROONEY. Where do you inspect the vehicles—on the roads

or in the shops?

Mr. Close. Mostly the inspections are at weighing stations, truck stops, places like that, because our inspectors do not have curbing authority; in other words, they don't have lights on the tops of their cars and uniforms to identify them at some distance that they are

law enforcement personnel.

So they approach the trucks when they are stopped and they rely principally on stationary runup test procedures which we had initiated and which the Society of Automotive Engineers took further along to prove that it was indeed quite well related to new truck test procedures and is a more reliable, higher-yield type of test than sitting beside the road with a meter and trying to beat the CB's.

Mr. Rooney. But totally inadequate, would you say?

Mr. Close. No, sir, I would not. I think it is limited, but it is certainly not totally inadequate. I think the compliance statistics indicate that the industry is aware that the inspectors are there, that they will show up without warning. With the kind of tests that we are using—the stationery runup test—the option for the drivers to cheat is removed. The procedure is much more controlled than trying to make measurements alongside the road, where they can blow the horn or by CB or light-flashing say, "There is a 'Bear' out there checking."

Mr. Rooney. Are they on just the interstate system?

Mr. Close. Not just interstate.

Mr. Rooney. Are they on the primary roads?

Mr. Close. Yes, sir; also included in this would be shop inspection. They would come into a truck facility and run tests in his yard because the vehicle does not have to be driven; it just sits out in the clear area and the prescribed engine runup is performed.

Mr. Rooney. Are the truck and the bus engine the same? I asked

that question the other day.

Mr. Close. Yes, sir; they are.

Mr. Rooner. Should they be subject to the same EPA interstate motor carrier regulations?

Mr. Close. We certainly thought so and we have prodded EPA

accordingly.

Mr. ROONEY. What was the response?

Mr. Close. They chose to set buses as a separate category and toundertake separate studies and now are approaching the point of a new rulemaking procedure on buses.

Mr. ROONEY. I asked this question of EPA the other day. Do you think that EPA should consider rail yards in their regulations re-

lating to railroads?

Mr. Close. Yes, sir: in fact, in the development of the interstate motor carrier and interstate rail carrier regulations, we were proceeding in parallel in the task force efforts. The motor carrier standard then was given priority because it was really a better understood proposition. That standard was put out by EPA.

The task force on rails was dissolved before completing its task. We lost communication with EPA for a period of 3 or 4 months and weren't at all sure what was happening with the rail standards but were told that a proposal would be coming forth shortly and that we would have to perform the reverse consultation on that

So we took what we thought was a reasonable approach to the problem and were trying to obtain some opinions from outside individuals and, in fact, got the Association of American Railroads to agree—rather reluctantly but nonetheless they agreed—that reduction of yard noise would be a viable approach to rail control. We believe that the standards should include not only the rolling stock but the yards and auxiliary equipment within the yards.

Mr. Rooney. It is refreshing to the chairman to know that the relationship between FAA and DOT and EPA is coming closer together. I wonder whether or not they are familiar with the comparative effectiveness of aircraft noise regulations in the top 25

airports. Do they have a copy of this?

Mr. Close. Yes, sir; following hearings in another subcommittee where this information before you was also presented, we provided the background information to EPA on how this was developed. I had a meeting with Mr. Elkins and explained all this material to him and provided some additional information to help him.

Mr. Rooney. When was that?

Mr. Close. That was about 2 weeks ago, April 11.

Mr. Rooney. Thank you very much for your appearance today, Mr. Close. The chairman has no further questions but some of my colleagues have implied they might have questions, so we will direct those questions to you. The record will be kept open.

Mr. Close. Thank you, Mr. Chairman.

Mr. Rooney. Our next witness will be Mr. John Tyler, technical consultant, National Organizations to Insure a Sound-Controlled Environment.

Do you think that will ever be possible, Mr. Tyler?

### STATEMENT OF JOHN M. TYLER, TECHNICAL CONSULTANT, NOISE—NATIONAL ORGANIZATIONS TO INSURE A SOUND-CONTROLLED ENVIRONMENT

Mr. Tyler. It takes a lot of work. We have to keep at it.

Good afternoon, Mr. Chairman.

Mr. Rooney. It is nice to have you here, Mr. Tyler.

Mr. Tyler. My name is John M. Tyler. My background is primarily as an engineer in charge of research and development in the field of aircraft noise abatement at Pratt and Whitney Aircraft. During the last 10 of my 33 years at Pratt and Whitney I was involved in representing the company as chairman or member of various industry committees and task forces in dealing with the FAA and other industry and Government agencies in connection with aircraft noise problems.

I was the organizer and chairman of the research committee of the National Aircraft Noise Abatement Council. NANAC was a council made up of the aircraft industry trade associations ATA, AIA, AOCI, ALPA, and AAAE. The NANAC research committee developed an operations research project in 1966-67 to be funded by the aircraft manufacturers and the airlines to determine the least-cost method of reducing the noise impact on communities near air-

ports.

After the passage of the Aircraft Noise Abatement Act of 1968 I was involved in industry meetings and meetings with the FAA regarding the aircraft noise limits to be established in the Federal Aviation Regulations, part 36—FAR 36. I retired from Pratt and Whitney in 1970 to continue my work but as an independent aircraft noise consultant supporting known means for reducing aircraft noise

in areas near airports.

I worked on the Noise Control Act of 1972, particularly in the House of Representatives. I served with several of the EPA task groups in developing material used by EPA in carrying out the requirements of the Noise Control Act of 1972. I have presented testimony at most of the hearings on EPA proposals to the FAA for improved control of aircraft noise. My review of the performance of the EPA in carrying out its responsibilities under the Noise Control Act of 1972 is therefore from a relatively close-in point of view.

Rather than reading the rest of my testimony, I would prefer to to hit some of the highlights and then permit you to ask questions. Mr. Rooney. Without objection, I did read your testimony, Mr. Tyler, and it is a very fine statement. I do have some questions that

I would like to ask you.

Mr. Tyler. May I make a few more remarks before you start?

Mr. Rooney. Certainly.

Mr. Tyler. The first two tasks that I wanted to mention were the development of criteria document and the levels document by EPA. This was called for in the law. I feel that the EPA did a creditable job. It was something that was very much needed.

I have served on national and international standards committees for many years, and in those committees usually it is necessary to get a complete agreement in order to establish a standard. As you know, this can go on year after year after year with individuals who are on there to be obstructionists just to prevent a standard from being established. It is desirable to have an organization that can take forceful action and eliminate the obstructionist point of view.

I would also like to say that the Noise Control Act of 1972, as it came out, was probably not what the Congress would have worked out had it had sufficient time. The act passed within the last few minutes before adjournment, before the end of the session, and changes were made in the last few hours, particularly in the section relating to EPA versus FAA responsibility for aircraft noise.

The act seemed to pit the EPA and the FAA against each other, which, I think, was very unfortunate and it made the work of both EPA and FAA difficult during the period in which the EPA was required to develop proposals for implementation by the FAA.

The act also left some loose ends, one of which you have referred to in connection with the time required for the FAA to respond after the EPA makes a proposal and has a hearing. The 2-year time period indicated by the previous witness would perhaps seem reasonable if the FAA were starting from scratch. But in many cases these proposals have to do with programs which have been ongoing for quite a few years.

quite a few years.

The FAA is in just about as qualified a position as the EPA at the point when the proposal is made. I disagree that a period of 2 years is a reasonable time to respond to something on which the

FAA is right up to the minute.

The EPA proposed an airport noise abatement regulatory process. This name, "regulatory process," indicates it is not a regulation, and it turned out that it was very difficult to develop a regulation.

The FAA has the responsibility for establishing noise levels of aircraft by means of its FAR 36 regulation; also the FAA is responsible for operating procedures on approaching and departing from an airport. After you have taken away those two options, then the remaining control of aircraft noise around an airport is pretty limited.

The EPA, I think, made a valiant effort to produce something that was worthwhile—not a regulation but, as they called it, a regulatory process. I can give them some good points for trying but it

did not turn out to be something that was operable.

However, during that period in which this proposed regulatory process was being developed, there must have been some rather effective cooperation between the EPA and the FAA because during the same time period, the DOT-FAA airport noise policy was released, on November 18, 1976, containing very much the same material that we found in the EPA proposal for regulatory process. I just have the feeling—I have no way of knowing but I think this was work behind the scenes which was relatively effective.

I think this is the kind of activity which is perhaps more productive than the kind of activity that we have had on the other proposals which EPA has made to the FAA. It might well be that the Congress could utilize that experience in establishing future re-

lations between the EPA and the FAA.

Just listening to the previous witness, I made some notes and I might comment on some of the points made in that presentation. One point has to do with the EPA proposal for noise regulations to the FAA on aircraft noise. The implication was that the proposal was based on health and welfare only and that it was then the job of the FAA to consider such things as safety and practicality and so on.

I happen to know that the proposals were made taking into account safety, economics, practicality, right down the line with the idea that the proposal would have the best opportunity to be approved

by the FAA.

A second point has to do with the chart which was included in the previous witness' material. The chart showed a curve of the noise levels. The indication was that these were the noise levels which would have been achieved had the FAR 36 regulation not gone into effect.

Then it showed a curve dropping down and the implication was that this was the result of the FAR 36 noise limit. This is not true. At the time the FAR 36 1969 regulation was put into effect, three airplanes were in the process of certification, the 747 being a little

ahead of the DC-10 and the Lockheed 1011.

The manufacturers of these airplanes had gone through a process of determining the means for reducing noise in inlets and fan discharge ducts by means of duct treatment. These airplanes were essentially ready to go into production. One was actually in production. And those airplanes utilized high bypass ratio engines, which inherently produced less noise. The manufacturers had already incorporated in those airplanes the duct treatment which achieved the levels which they had. The levels of the DC-10 and the Lockheed 1011 were significantly below the FAR 36 requirements.

With regard to the setting of FAR 36 limits in general, there seems to be a difference in policy between the EPA and the FAA. The FAA had set limits for new aircraft in 1969 and just recently, in 1977, and in each case the limits have been set to be implemented essentially at that point in time, which means that the limits have to be such that airplanes ready to go into production can meet those limits. Now, this is essentially looking backward and certifying the designs of aircraft that the manufacturers are already in a position to build.

The EPA proposed two sets of limits, one to be set for airplanes built after 1980, another set to be used for airplanes built after 1985, based on technology which could be implemented on those

dates

Now, those limits would have called for planning on the part of aircraft manufacturers to meet a goal and they would have given the airplane manufacturers enough advance notice, enough time, to achieve greater reductions than could be achieved at the time of the release of the information and the implementation more or less simultaneously.

Now, I think this is rather important, perhaps not from the standpoint of the FAA's concern but more from the standpoint of the concern which a people-oriented agency would have looking at the impact on communities in the future. If you are to do planning around an airport, you would like to know what the noise levels will be a considerable distance down the road.

If you are concerned with that factor, then you would like to set noise levels far enough in advance so that you can plan even further in advance when those airplanes are in the fleet and present airplanes have been retired.

This concludes my statement, Mr. Chairman. [Mr. Tyler's prepared statement follows:]

STATEMENT OF JOHN M. TYLER, TECHNICAL CONSULTANT, NOISE (NATIONAL ORGANIZATION TO INSURE A SOUND-CONTROLLED ENVIRONMENT)

My name is John M. Tyler. My background is primarily as an engineer in charge of research and development in the field of aircraft noise abatement at Pratt & Whitney Aircraft. During the last ten of my thirty-three years at Pratt & Whitney I was involved in representing the company as chairman or member of various industry committees and task forces in dealing with the FAA and other industry and government agencies in connection with aircraft noise problems.

I was the organizer and chalrman of the Research Committee of the National Aircraft Noise Abatement Council. NANAC was a council made up of the aircraft industry trade associations; ATA, AIA, AOCI, ALPA, and AAAE. The NANAC Research Committee developed an operations research project in 1966-67 to be funded by the alreraft manufacturers and the airlines to determine the least cost method of reducing the noise impact on communities near airports.

After the passage of the Aircraft Noise Abatement Act of 1968, I was involved in industry meetings and meetings with the FAA regarding the aircraft noise limits to be established in the Federal Aviation Regulations Part 36 (FAR36). I retired from Pratt & Whitney in 1970 to continue my work but as an independent aircraft noise consultant supporting known means for reducing aircraft noise in areas near airports.

I worked on the Noise Control Act of 1972, particularly in the House of Representatives. I served with several of the EPA task groups in developing material used by EPA in carrying out the requirements of the Noise Control Act of 1972. I have presented testimony at most of the hearings on EPA proposals to the FAA for improved control of aircraft noise. My review of the performance of the EPA in carrying out its responsibilities under the Noise Control Act

of 1972 is therefore from a relatively close-in point of view.

Two early EPA tasks were the development of the Criteria Document and the Leveis Document. These tasks required the drawing together of knowledge and organizational skills in a relatively short period of time and weeding out the obstructionist contributions from the material of real substance to put together basic documents on which the country can build with confidence. Having served on national and international standards committees which have been struggling to reach agreements in this area for decades I can compliment the EPA on a job well done on these documents.

The EPA made a particularly good choice in establishing Ldn as a measure of cumulative noise impact. The background experience with NEF and similar units was saved but it required no special instrumentation or calculation to obtain the noise level input. My particular interest has been the EPA performance in the area of aircraft noise. The EPA was given a difficult role in this area. It was required to assess the FAA's past performance and recommend regulations which it felt FAA should implement. This assignment did not endear the EPA to the FAA.

The FAA refused to participate in the EPA program of developing background material from which an assessment of aircraft noise regulation by the FAA could be made. The FAA's argument was that if it would be required to judge the desirability of Implementing EPA proposals later on, it could not be a part of making those proposals. The FAA didn't help make proposals and of course they didu't permit the use of their wealth of background information for any other purpose either. This was a definite handicap to the EPA. The ATA also played an obstructionist role but the aircraft manufacturers were cooperative.

The EPA suffered from internal political dissension that hampered the work while the first deputy assistant administrator for noise control programs was in charge. However, under his replacement the work has moved along smoothly. The EPA is to be complimented on the thoroughness of its work on the proposals for aircraft noise abatement regulations to be implemented by the FAA. It required a long time to make the studies and prepare the proposals but EPA was essentially in the position of an outside investigator not having direct access to information which would have expedited the work.

The Noise Control Act did not specify the time period for the response of the FAA to the EPA proposals and the FAA took up to almost 2 years to respond. It was no surprise to have the FAA reject several EPA proposals without giving them serious consideration. This was the FAA reaction to a threat of EPA invasion into their domain. EPA's sensitivity for the impact of noise on people must be brought into the control of aircraft noise. I believe the Congress must give the EPA more authority in setting limits in the field of air-

craft noise.

In my opinion the EPA proposal for control of aircraft noise by the airport operators was an exercise in futility. Those of us in the industry who have worked on this problem for the last 25 years know that reduction of noise around airports requires reduction of the noise of the aircraft and the use of noise abatement operating procedures. If there are no low noise aircraft and no noise abatement operating procedures, both of which are controlled by the FAA, there is relatively little that the airport operators can do and still provide a useful airport facility. The EPA had proposed lowering the aircraft noise limits (FAR 36) and proposed noise abatement operating procedures which the FAA felt free to ignore. The EPA was therefore in the position of making a proposal for airport noise certification knowing that its important options were gone.

On the positive side the EPA proposed to have the airport noise situation

opened up for all to see and decide where to go from here.

To summarize my opinion of the EPA's performance on aircraft noise under the Noise Abatement Act of 1972, I believe:

1.. The law gave the EPA a set of tasks to perform and these tasks were performed with skill and sensitivity to the impact of aircraft noise on people.

2. The aircraft noise regulations proposed by EPA to FAA represented significant positive steps which merit serious consideration and in most cases

adoption in whole or in part by the FAA

3. The FAA's refusal to give the EPA's proposals serious consideration confirms again the need for injecting some consideration for people into the FAA regulatory process. Having this finding confirmed again may be of considerable value to the Congress.

Mr. Rooney. Thank you very much, Mr. Tyler. I do appreciate your being here today. I guess the committee would consider you a

concerned citizen.

Mr. Tyler. With my 33 years at Pratt and Whitney Aircraft I am concerned about the industry. During my tenure at Pratt and Whitney my assignment was to do what I could to achieve noise abatement for aircraft engines. That was an assignment by an engine manufacturer.

Mr. Rooney. Are you working with an association now?

Mr. Tyler. Now I am a consultant to an organization of communities near large airports which are impacted by aircraft noise.

Mr. Rooney. Whom do you represent? What communities?

Mr. TYLER. There are roughly 32 communities, mostly around large airports—Kennedy, O'Hare, Los Angeles, Atlanta, Minneapolis, a lot of other airports.

Mr. Rooney. On page 3 of your statement you refer to the internal political dissension that hampered the work of the EPA while the first Deputy Administrator was in charge of the noise control pro-

gram. Mr. Tyler, would you care to comment on that intraagency political dissension? To date the subcommittee has heard of only interagency conflicts.

Mr. Tyler. This is not an interagency problem. This is an internal

problem within EPA.

Mr. Rooney. What was the problem?

Mr. Tyler. Just that the individual in charge of the Office of Noise Abatement seemed to be having problems with his employees.

This is on page 3, you say?

Mr. Rooney. At the bottom. "The EPA suffered from internal political dissension that hampered the work while the first Deputy Assistant Administrator," et cetera.

Mr. Tyler. Yes; that was the case. This was not an interagency

problem.

Mr. Rooney. What were the problems?

Mr. Tyler. As I mentioned, just that the man in charge of the Office of Noise Abatement was not getting along with the employees, and the efficiency of the group was not therefore up to par.

Mr. Rooney. You then state that this political dissension no longer exists since Mr. Elkins has become the Deputy Assistant Admin-

istrator, is that correct?

Mr. Tyler. That is correct.

Mr. Rooney. However, this subcommittee has learned that the internal dissension still exists within the Office of Noise Abatement and Control. You obviously don't believe that.

Mr. Tyler. I am not aware of internal dissensions. Perhaps I am not that close to their internal workings. From my point of view

this seems to be a smooth operation.

Mr. Rooney. That is what you say—things are running smoothly. However, the GAO report states there are many problems within the ONAC such as the slow implementation of programs, a lack of overall strategy, a lack of coordination or research programs. What is your response to the report's findings?

Mr. TYLER. As I mentioned in my writeup, I think the EPA had some real handicaps in getting itself underway, starting in as an agency that was not clued into the information which had been

collected by the FAA over a long period of time.

As I mentioned, the FAA took the position that it could not very well cooperate with the EPA if the EPA proposals were to be reviewed by the FAA at a later date. I think that is a position that may well have had some substance to it. It may well have been exaggerated. I think there could have been a great deal of assistance that the FAA could have provided to the EPA while it was getting under way and could have expedited the work of EPA.

Mr. Rooney. Thank you very much for your testimony. We appre-

ciate your appearance.

Mr. Tyler. You are welcome, Mr. Chairman.

Mr. Rooney. Our next witness will be Mr. John Thillman, chief of environmental and technical services, Fairfax County Board of Supervisors, and Dr. Donna Dickman, director for first areawide noise control program. Do you two work together?

## STATEMENT OF JOHN H. THILLMAN, CHIEF, ENVIRONMENTAL AND TECHNICAL SERVICES, FAIRFAX COUNTY BOARD OF SUPERVISORS

Mr. THILLMAN. We do not work together. They work with the Council of Governments; I work for the Fairfax County government.

Mr. Rooney. Don't you work with the Council of Governments?

Mr. THILLMAN. We do, yes.

Mr. Rooney. Do you have good cooperation with COG?

Mr. THILLMAN. Yes, sir.

Mr. Rooney. I recently heard that they are not working too well

together in this area.

Mr. Thillman. Perhaps with the Metro problems rather than with noise—the transit problems we are having rather than with noise.

Mr. ROONEY. Transit doesn't come under the jurisdiction of this

committee; so you may proceed.

Mr. Thillman. Mr. Chairman, I would like to express an apology that the chairman of our board of supervisors was not able to make it this afternoon when the hearing was changed. Mr. Herrity does send his apologies. The county executive and the board of supervisors have authorized me to appear before you today and submit the following testimony. I would like to read, then, from the submission.

Mr. Rooney. You may proceed.

Mr. THILLMAN. Mr. Chairman and members of the committee, my name is John H. Thillman, staff to the Fairfax County Board of Supervisors. I am here under the direction of the board and the

county executive.

Fairfax County concurs with the recommendations of the Comptroller General's report that Congress should begin hearings to evaluate the past performance of and to provide guidance for future activities of the national noise control program and we are pleased that the hearings have begun. We, as is the case in every urban jurisdiction of the country, are inundated by noise problems. However, our experience and problems relate more specifically to noise problems from airports and highways, the airports being Dulles Airport and Washington National Airport, the highways being the beltway which traverses Fairfax County north and south, Interstate Route 95, which also traverses Fairfax County north and south, Interstate Route 66, east and west, and Dulles Access Highway, which is also an east-west highway, in addition to many arterial highways.

Rather than for me to discuss in detail the problems which Fairfax County has had with aircraft noise, which we consider our major

problem, let me just make the following points:

The Noise Control Act has been in force since 1972. EPA, as the agency responsible for coordinating Federal noise research, probably has not performed up to full expectations. However, we would ask: How much of the fault lies with EPA when the official resistance by other Federal agencies such as the FAA is considered? For instance, EPA has indicated that LDN should be used by the FAA as

an aircraft descriptor; and promptly thereafter the FAA, in the Concorde draft environmental impact statement, used NEF to de-

scribe the noise impacts around Dulles Airport.

It has been massive efforts by the affected citizens of this country to have the FAA release its aircraft noise policy. EPA could not force the FAA to release it. Indeed, instead of the Congress' reviewing EPA agency performance, the Congress should be giving the EPA more tools to carry out its assigned task.

Recognizing that aircraft noise is a problem of jet aircraft such as the older, noisier ones versus the newer, quieter ones and numbers of flights, we feel that even with quieter engines on newer aircraft, this advantage in reduced noise will disappear because the FAA can then increase the number of flights to fill the void of less noise.

The EPA has no control over these types of actions, so indeed the statement by the Comptroller General's Office that "the country is still noisy" doesn't recognize these types of problems. Again, agency performance will not be able to change this problem. However, if the EPA were given the responsibility for insuring noise abatement around airports, then even the FAA would have to react and be held to their own recommended noise reduction policies.

On the issue of highway noise, I would like to make the follow-

ing comments:

A major factor in community noise pollution in areas other than those impacted by our airports is from highway traffic, particularly the noise from heavy trucks on our interstate highways and other major arterials. As in airport impact areas, noisy highways have a severe impact upon the adjacent land, in some cases to a distance of 500 feet.

EPA has promulgated noise standards for new trucks and for trucks engaged in interstate commerce. This reduces the noise level somewhat from what it would otherwise be, but at this time there are technical limitations to the reduction of noise from trucks. Until new engines and technology are developed, our trucks and automobiles will continue to be noisy. And, unfortunately, it seems that making an engine quieter also makes it consume more fuel, which mandates that much more research and development are still needed.

It is possible to reduce the impact of highway noise by building roadside noise barriers, but there is little money available for such noise abatement and most of that which is available must be used for noise abatement along new highways. What we need is noise abatement along existing highways, just as we need noise abatement

at existing airports.

Fairfax County has many square miles of land impacted by excessive noise from our busy freeways and from Dulles and National Airports. Traffic increases every year and the noise impact increases every year. This noise is not frozen at the levels of 5 or 10 or 20 years ago, when they were designed and built. To get at the land transportation source of the problem, much more research needs to be done in the areas of tire noise, engine noise—particularly heavy trucks—and the actual design of roadways to reduce impact.

In recent months EPA has helped Fairfax County with assessment of noise impact. In fact, now, at the time of these hearings,

EPA personnel from the regional office at Philadelphia are helping us with the analysis of noise impact at proposed residential development sites along I-66. With their assistance, including the use of advanced and expensive noise analyzers, we can at least begin to measure the dimensions of our noise problems. Unfortunately their resources are limited in both manpower and quantity of equipment for noise analysis, but they have been helpful to the limit of their capability and the quality of their help to us in the past has been excellent.

The final point that I would like to make is that it is Fairfax County's position that EPA should continue to raise its efforts to a higher level in the area of noise research. We feel that it should be left alone to continue this effort and that if there is any sentiment, Mr. Chairman, by this committee to remove the noise act from EPA to some new agency, it can only delay and cause confusion. A new agency would take at least 3-plus years to get to the point where EPA currently is.

Thank you, Chairman Rooney and members of this committee, for this opportunity to speak to you. I will be glad to answer any

questions.

Mr. Rooney. Thank you. I think the Fairfax County commissioners have made an outstanding effort in reducing noise at the National Airport. Don't you have some kind of agreement with the National Airport that there are no takeoffs or landings after 10 o'clock in the evening?

Mr. THILLMAN. National has operational procedures for aircraftflights. There are time limits for the flights. However, even with the operational procedures which the FAA has endorsed and indeed mandates that the pilots follow, there are problems in that pilots

don't follow those procedures.

There is a intensive noise problem, not necessarily in Fairfax County in this respect but mostly Arlington and the city of

Alexandria.

There is now a proposal by the Fairfax County board—indeed the entire Washington metropolitan area—to change the noise patterns from National Airport to disperse the flights. That would impact probably about an additional 45,000 people but it would reduce the noise to a significant extent for a number of people who live in the highly impacted areas at this time. That is under consideration at this point and public hearings will begin in about 3 weeks on that issue. We don't have anything like that for Dulles Airport.

Mr. Rooney. How about the Concorde at Dulles?

Mr. Thillman. The issue of the Concorde at Dulles has been litigated, I believe, four times. I think there is one suit still pending.

The way we feel about the Concorde is simply that we seem to have no control over Dulles Airport. The obvious reason, of course, is that it is an FAA-controlled airport. Under the FAA's new airport policy, noise control for aircraft, that they released about 2 months ago, they talk about the responsibility of the airport operator, local jurisdiction, and FAA. It seems, however, that in the case of Dulles Airport and National Airport, the operator and the FAA are one and the same.

We have no influence, as a local jurisdiction, over the airport operator, which means that no matter what we do in adjusting landuse policy to accept increasing noise, FAA can change whatever procedure they have to make the noise different—that is, impact more people, increase more land for unsuitable uses for residential.

In Fairfax County alone, with the Concorde draft environmental impact statement noise zone, we doubled the size of the impact area around Dulles Airport. Doing that means that those additional 4,000 or 5,000 acres can't go into residential development, which also means that the other development alternatives are industrial and com-

mercial.

Also, it means at this point there is a 50-year time lag between the actual time it takes or would take to develop those areas for industrial or commercial uses, which means that we are probably dragging that on beyond that point, which means that the land cannot be used for 60 or 65 years.

Mr. Rooney. Thank you very much.

The Chair notes that there is another vote pending. We will take another 15-minute recess.

[Brief recess.]

Mr. Rooney. We will now hear from Dr. Donna Dickman, director for the first areawide noise control program, Metropolitan Washington Council of Governments.

### STATEMENT OF DONNA DICKMAN, FIRST AREAWIDE NOISE CONTROL PROGRAM, METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS

Ms. Dickman. Mr. Chairman and members of the subcommittee, my name is Donna Dickman and I am director for the first areawide noise control program, Metropolitan Washington Council of Governments. I would like to address several issues in support of the ex-

tension of the Noise Control Act of 1972.

Similar to other major metropolitan planning organizations throughout the country, the Metropolitan Washington Council of Governments is the regional organization of the Washington, D.C., area's major local governments and their governing officials plus the area members of the Maryland and Virginia Legislatures and the U.S. Senate and House of Representatives, 220 members in all. In fact, this month COG celebrated 20 years of working toward solutions to such regional problems as growth, transportation, housing, air pollution, water supply, and noise.

In 1974, COG initiated its areawide environmental noise program. The purpose of this program is to coordinate noise control efforts in the metropolitan area. Through this program and our monthly meetings with area noise program directors, we have a continuing opportunity to assess the problems associated with the implementa-

tion and enforcement of local noise control strategies.

The provisions of the Noise Control Act and the priorities and procedures established in its implementation directly impact State and local noise programs. Our area noise programs, like most noise programs in the country, are restricted by very small staffs and limited

budgets. Under the existing provisions of the Noise Control Act there is no mechanism for direct financial aid such as a grant program to assist local noise programs. The addition of grant authority under the act would be of great benefit in that it would provide both an opportunity for expansion of existing programs and promote new programs in areas where noise control is presently not being addressed.

We have recently had the opportunity to review the U.S. EPA's proposed national strategy for noise abatement and control. Basically the nature and scope of the proposed national strategy will serve to strengthen local noise control efforts. There is a pressing need for expediting national regulations, enforcement efforts, and labeling programs. Local individual noise programs cannot effectively implement these types of controls, and the effectiveness of our programs are constrained by the absence of these national regulations, enforcement efforts, and labeling programs. We recognize the complexities involved in the orderly accomplishment of these national control efforts; however, we feel that EPA has now completed all of the necessary groundwork and can and should move rapidly toward effective regulatory and labeling programs. Local programs would also benefit from additional guidelines similar to the model community noise control ordinance since small programs have time and personnel constraints which limit research capabilities.

Over the past 3 years, our area noise programs have received valuable technical assistance from EPA's central and regional offices. Unfortunately the limitation of EPA's staff makes it impossible for it to respond to all of our requests. Therefore, we strongly support the need for additional personnel to expand EPA's capability to

assist State and local noise programs.

In the Metropolitan Washington area aircraft noise, as you have heard today, is a major concern to our residents. Our State and local programs are severely limited in their authority in this area. Thus we are forced to depend on Federal resolution of the problem. Unfortunately, as you know, apparent difficulties exist between EPA and FAA in working toward resolutions of aircraft noise problems. We are most concerned that the roles of the two agencies be clarified so that our area residents can benefit from cooperative Federal action to alleviate aircraft noise problems as soon as possible.

The General Accounting Office's review of EPA's implementation of the Noise Control Act is, as you know, very critical. Certainly the visible end products of EPA's efforts over a 5-year period are not as numerous as one might expect. Conversely, it may well be that the time heretofore devoted to organization and thorough preparation prior to embarking on an aggressive program may be far more beneficial in the long run. To transfer the authority of the act to another agency would undoubtedly result only in additional delays. It is our opinion that EPA has recently made increasingly greater strides in implementing the act. Therefore we look forward to EPA's continued and growing progress in management of our national noise strategy program. Thank you.

Mr. ROONEY. Thank you, Dr. Dickman. The noise problem in Washington, then, as far as you are concerned—the biggest one—is

National Airport?

Ms. Dickman. I think, certainly, aircraft noise is the major problem is this area. National Airport impacts a greater number of people; therefore, I see it as a first priority of concern.

Mr. Rooney. Where do you live in this area?

Ms. DICKMAN. I live in Georgetown.

Mr. Rooney. No wonder you are concerned.

Ms. DICKMAN. My patio is usually not usable during the hours when one would most like to use one's patio.

Mr. Rooney. What does your staff consist of in the Metropolitan

Washington Council of Governments?

Ms. Dickman. COG has a staff of 200. I am in the Department of Health and Environmental Protection within COG and we have a staff of four people directly involved in noise control.

Mr. Rooney. Do you get any financial assistance or any assistance

from EPA?

Ms. Dickman. We were originally funded through HUD. We also have local funding, as do many of the Council of Governments' programs—the 16 area local governments. We presently have a minimal level of funding from EPA, funding from HUD, and funding from FAA.

Mr. Rooney. How about technical assistance?

Ms. Dickman. We have received a great deal of technical assistance

from EPA throughout the metropolitan area.

Mr. Rooner. You state that the addition of grant authority under the act would be of great benefit to the local noise programs in that it would provide an opportunity for expansion of existing programs to promote new programs in areas where noise control is presently not addressed. What requirements would a local program have to meet in order to receive a grant from the Government?

Ms. DICKMAN. I should think that the Washington area is a bit unusual in that, although our noise program efforts on the local levels are relatively new, they are, in the final analysis, far more pro-

gressive than most programs in other parts of the country.

In many areas there are no programs whatsoever. Under a grant's program I should think that it would be important to foster the initiation of new programs as the first order of business. Requirements should include a commitment by the local government to work toward adoption and enforcement of noise control legislation.

Mr. Rooney. You indicate a concern regarding the need for additional personnel to expand EPA's capability to assist State and local programs. I would like to know whether or not you would comment on the fact that ONAC is presently spending 70 percent of its budget on contracts with outside groups. If EPA redirected that money to hiring more people, would not this be the answer—appropriating more money so that EPA could hire more personnel? I think I raised that question the day before yesterday.

Ms. DICKMAN. I should think that, from the standpoint of our area—and this is the area that I am aware of; the region 3 office of EPA has a very small staff, which is unable to respond to all of our needs for technical assistance within this area—we would be very much in favor of expansion of the technical assistance program to

local governments.

Mr. Rooney. What is your background, Dr. Dickman? How did you get involved in this—I am very curious—other than having a

patio in Georgetown?

Ms. DICKMAN. Unfortunately, I didn't have the patio when I started out. I am an audiologist. My doctoral research was in the area of the effects of noise on human health and welfare. I have been with the Council of Governments now for 2 years. Prior to that I was the director of an industrial hearing conservation program.

Mr. Rooney. Thank you very much for appearing before the com-

mittee this afternoon.

Ms. DICKMAN. Thank you, Mr. Chairman.

Mr. Rooney. Our final witness will be M. B. Doyle, president and chief executive officer, International Snowmobile Industry Association.

# STATEMENT OF MORTIMER B. DOYLE, PRESIDENT AND CHIEF EXECUTIVE OFFICER, INTERNATIONAL SNOWMOBILE INDUSTRY ASSOCIATION, ACCOMPANIED BY ROY W. MUTH, DIRECTOR, TECHNICAL SERVICES

Mr. Doyle. Thank you, Mr. Chairman.

Mr. ROONEY. I want to apologize to the witnesses for the intervention we have had with the bells. Unfortunately this meeting had to be rescheduled to this afternoon. It had been scheduled for this morning but was preempted by the full committee. So we apologize.

Mr. Doyle. Mr. Chairman, I have with me Mr. Roy Muth, who is

director of technical services for our association.

As you stated, I am president and chief executive officer of the International Snowmobile Industry Association. On behalf of our members we greatly appreciate the opportunity to speak at these hearings.

May I suggest, as you requested, Mr. Chairman, that I brief this

testimony and ask that the full text be included in the record.

Mr. Rooney. Without objection.

Mr. Doyle. I believe I should complete my portion of the reading probably in 6 or 7 minutes. We have two charts that will take about 2 minutes. If that is permissible, I will proceed.

Mr. Rooney. Without objection, you may proceed.

Mr. Doyle. Our purpose for requesting this time is to share with the Congress our industry's experience in dealing cooperatively with the Environmental Protection Agency to voluntarily and dramatically reduce the sound emissions of snowmobiles. Ours is a story of mutual desire on the part of industry and government to reduce sound levels, which has been implemented through the medium of voluntary action, not mandatory Federal legislation. Perhaps our experience is unique but it does suggest a course of conduct that can be followed by others. It also suggests successful achievements by the Office of Noise Abatement and Control of the Environmental Protection Agency that are not measured by how many regulations it has written. The bottom line is that snowmobile sound emissions have been reduced by nearly 94 percent since 1968, to a level that does not intrude in an unwanted manner on our environment. As an in-

dustry, we are proud of our achievements and want the Congress to know that we respect the effective leadership within EPA that has firmly and wisely participated in this process of achievement.

I would like to introduce my testimony with a little background on ISIA. We are a trade association composed of members whomanufacture over 90 percent of the snowmobiles that are sold in North America plus associate members who are suppliers of accessories and parts. Founded in 1965, the ISIA represents companies that are dedicated to producing quality vehicles which incorporate the latest in both safety and performance features. The industry and sport of snowmobiling annually generate nearly \$2 billion in total sales of machines, accessories, parts, and related services and activities.

It is estimated that in North America snowmobiling provides jobs: for more than 160,000 people and contributes millions of dollars in taxes and registration fees annually to State and Provincial govern-

When ISIA was founded, snowmobile manufacturers were producing approximately 30,000 machines annually. The machines manufactured in those early years bear very little resemblence to the ones being manufactured today, just a little more than a decade later.

As more people bought these machines, there began to be criticism about their high sound levels—over 100 decibels in some cases. Improvement of the sound characteristics of the vehicle became one

of the top research projects in the industry.

Beginning about 9 years ago and responding to a clear need for quieter machines, manufacturers began a progressive noise reduction program. This effort was formalized in May 1974 with the formation of the Snowmobile Safety and Certification Committee, Inc.

The SSCC has published a machine standards program, willch includes a standard for sound emissions. Effective February 1, 1975, all snowmobiles produced by participating manufacturers conform to these minimum safety standards including the sound level standard. This coming season, manufacturers of 91 percent of all snowmobiles will be participants in the SSCC safety certification program.

The State of Wisconsin has joined the States of Maine, Vermont, Rhode Island, and Pennsylvania in requiring that new snowmobiles sold in the State be independently certified as being in compliance with its 78-decibel snowmobile sound level regulations. As a result of the SSCC standards activity, all machines produced after February 1, 1975, by manufacturers participating in the program emit no more than 78 decibels when measured in accordance with Society of Automotive Engineers recommended practice J192a, exterior sound levels for snowmobiles. Effective June 30, 1976, these snowmobiles, in addition to meeting the SAE J192a test level of 78 decibels, must emit no more than 73 decibels when measured in accordance with Society of Automotive Engineers recommended practice J1161, operational sound level measurement procedure for snow vehicles.

The net result of this standards program is that, during the past two winter sports seasons, we know that through the combined efforts of manufacturers whose machines bear the SSCC label approximately 350,000 safer, quieter snowmobiles are in the hands of consumers. And, equally important, in each succeeding year, new machines, designed to meet environmental considerations, will be replacing the old vehicles that were the cause of a noise problem that no longer exists.

By the early 1970's, in response to the same excessive sound output of unmuffled snowmobiles, many Snow Belt States, along with Canada, had enacted laws and regulations aimed at restricting sound

emissions from snowmobiles.

The attainment of a 94-percent sound reduction has been both difficult and expensive. While we do not have total cost figures, the cost of achieving the reduction in sound levels from 84 decibels to 78 decibels has been calculated. To snowmobile purchasers this cost of quiet totaled over \$26 million at retail.

The National Bureau of Standards states the axiom this way: "It has long been recognized that as products are quieted more and more, the incremental cost per decibel of quieting typically in-

creases."

In an economic period characterized by a leveling off of consumers' discretionary incomes, many recreational industries have had to reduce their growth expectations sharply. The snowmobile industry in particular has been faced with costs rising significantly. A large part of these cost increases has been due to the sophisticated and expensive equipment necessary to bring about sound reduction.

The snowmobile price increases necessitated by sound reduction equipment, when added to those resulting from safety and other technological advancements and basic labor and material cost increases, have had a serious dampening effect on snowmobile sales.

When faced with the adopted sound regulations which I have just tabulated, combined with spiraling costs and a shrinking market, a large number of manufacturers pulled completely out of the snow-

mobile business.

During the period that total annual retail sales dropped from over 400,000 units in 1970-71 to an estimated 195,000 units in 1976-77 and regulated sound levels dropped from 84 decibels to 78 decibels, the total number of manufacturers dropped from over 110 to approxi-

mately 7 who will market machines next season.

As recently as September 1973 there were 38 snowmobile manufacturers actively engaged in snowmobile production. The list of companies remaining in the snowmobile industry and expected to market 1978 model year snowmobiles includes: Arctic Enterprises, Inc.; Bombardier-MLW Ltd.; Deere and Co.; Kawasaki Motors Corp., U.S.A.; Polaris E-Z-GO, division of Textron, Inc., Scorpion, Inc.; Yamaha Motor Co., Inc.

As noted earlier in this statement, the U.S. Federal Government does not at present regulate snowmobile sound levels. However, there has been a significant amount of interest at the Federal level in snowmobiles by the Environmental Protection Agency looking at the efforts of snowmobile sound on our citizens and our environment.

The snowmobile industry's work in coordination with EPA has resulted in a better product in the marketplace. We feel this cooperative effort presents an example of what can be done to meet environmental goals without mandatory regulations or ill-considered re-

quirements that would have had the effect of stifling a young in-

dustry.

In October 1973 ISIA staff met with representatives of the EPA Standards and Regulations Development Division in the first of what was to become a series of conferences to exchange viewpoints and information. I will not go over the many studies and meetings, Mr. Chairman; they are in the complete statement that is before you.

However, I should say that in July of 1976 snowmobiles were again the subject of very serious Federal sound emission studies. The EPA funded four studies; most of them have been concluded and I think that they are now being presented to the EPA. The EPA

appropriated about \$225,000 for these studies.

At the completion of this work, we believe, the EPA will be in a position to determine whether or not our industry's products require Federal regulation or whether such regulation should be left to the States.

I might state parenthetically there is no law or regulation in the United States or Canada that our industry is not meeting at the present time—laws being written provisionally by the Government of Canada or in the United States.

Mr. Rooner. If you have such a great record—and I am sure you do and I commend your industry for taking the initiative—if EPA were to adopt rules and regulations, what effect would they have on

your industry if you are so great?

Mr. Doyle. My guess is, Mr. Chairman, based on what we know of these four studies that they have engaged in—and we have indications of what they are, what they have concluded—that if they were to regulate us, they probably would regulate us at the level where we are today, 78 decibels, because we conducted an experiment with the EPA and they concluded that the machines are quite quiet today.

So the question before EPA is whether they should regulate at all

and if they should regulate at the level where we are today.

Mr. Rooney. Was this done on a voluntary basis or was the State

involved in regulating?

Mr. Doyle. The States were coming up with all types of regulations, some 70 decibels, some 73, with no technical background for it. We had a massive job of educating our industry and then educating the States and the Provinces as to what we could achieve and what was a good sound level.

It was in our best interest to do so, I have to admit that, because there was much public criticism. I have dealt with government agencies for 31 years. I have found a good formula is to keep working with them day in and day out until you get an understanding of

each other's problems.

I do want to commend publicly the EPA for taking the time to understand what we were trying to do voluntarily and letting us

have our head to see what we could do.

Basically this is the message, Mr. Chairman, I wanted to present to your committee. I will take 2 more minutes to show these two charts and then I will conclude my testimony. You have these charts in the testimony, [see p. 71], so I won't take too much time.

This is where the industry was in the pre-1968 unmuffled snow-mobiles that were being sold. They emitted up to 102 decibels. We were first able to bring it down to 96 decibels. A 6-decibel drop in sound levels is tantamount to taking 50 percent of the sound out of

a noise source, on a logarithmic basis.

The first objective of the industry was to take out 6 decibels of the sound. They have been able to do that four times; to remove roughly 94 percent of the sound that was in the machine at that period, which is no longer there. The actual reduction is 93% of the sound of the machine.

Mr. Rooney. For a tractor-trailer passing you in an open car on the highway traveling 55 miles an hour—they don't travel 55—what

decibel rating would that be?

Mr. Dovle. My guess is about 86.

Mr. Murh. Maybe 88.

Mr. Doyle. The difference between 88 and 78 is substantial in actual

noise pressure level.

The next chart is one that is quite significant. Back in this period of time—we were talking pre-1970—we had a maximum sound level; this is the same chart I showed you; this is the degree of change in it. The estimated number of snowmobile manufacturers at that particular time, as you can see, was substantial, 129, down to the 7 there are today.

This is how our sales curve went, up to 495,000 units sold at retail, and today we are at 195,000 units. There is a correlation between trying to reduce sound and the abilities of companies to do it.

Mr. Rooney. In that pre-1970 timespan, what was the snowmobile

selling for?

Mr. Doyle. Probably in the neighborhood of \$1,000 to \$1,100. Mr. Rooney. With all these improvements you have made in lower

decibels, what does it sell for today?

Mr. Doyle. Last year the highest price that I heard quoted for a machine sold was somewhat close to \$2,500. I would say the average is closer to \$1,500 today. The industry has been able, through technology, to absorb some of those costs, but not all.

Mr. ROONEY. Most of the cost, other than inflation and the cost of

increased wages, has been trying to come up with less noise?

Mr. Doyle. A good portion. A great company. Outboard Marine, tried to make a produce below 78 and succeeded but it was heavy and too wide. In the State of New York there are over 500 people who are over 70 years of age with registered snowmobiles. If you get the machine too heavy and too wide and it gets stuck in the snow, they are unable to handle it. Outboard Marine made the machine quite heavy and wide and it is now out of the snowmobile business. They lost \$35 million in the snowmobile business.

The cost of all of these programs is significant. What I am saying

is that it can be done but the price is horrendous.

Mr. Rooney. What is the decibel level when you are on a lake and there is an outboard passing you, talking about an average outboard?

Mr. Doyle. Outboard motor?

Mr. Rooney. Right.

Mr. MUTH. If you are talking of a similar test, 50 feet—I am guessing now—I would say 84, 82, in that range.

Mr. Doyle. This is the story we wanted to present. It is not one

of complaining, Mr. Chairman.

[Mr. Doyle's prepared statement and the attachments thereto follow:]

STATEMENT OF MORTIMER B. DOYLE, PRESIDENT AND CHIEF EXECUTIVE OFFICER,
INTERNATIONAL SNOWMOBILE INDUSTRY ASSOCIATION

Gentlemen, my name is Mortimer B. Doyle, I am President and Chief Executive Officer of the International Snowmobile Industry Association. On behalf of our members, we greatly appreciate the opportunity to speak at these hearings.

Our purpose for requesting this time is to share with the Congress our industry's experience in dealing cooperatively with the Environmental Protection Agency to voluntarily and dramatically reduce the sound emissions of snow-mobiles. Ours is a story of mutual desire on the part of industry and government to reduce sound levels, which has been implemented through the medium of voluntary action, not mandatory federal regulation. Perhaps our experience is unique, but it does suggest a course of conduct that can be followed by others. It also suggests successful achievements by the Office of Noise Abatement and Control of the Environmental Protection Agency that are not measured by how many regulations it has written. The bottom line is that snow-mobile sound emissions have been reduced by nearly 94 percent since 1968 to a level that does not intrude in an unwanted manner on our environment. As an industry, we are proud of our achievements and want the Congress to know that we respect the effective leadership within EPA that has firmly and wisely participated in this process of achievement.

I would like to introduce my testimony with a little background on ISIA. We are a trade association composed of members who manufacture over 90 percent of the snowmobiles that are sold in North America plus associate members who are suppliers of accessories and parts. Founded in 1965, the ISIA represents companies that are dedicated to producing quality vehicles which incorporate the latest in both safety and performance features. The industry and sport of snowmobiling annually generate nearly two billion dollars in total saies of machines, accessories, parts and related services and activities.

In North America, it is estimated that snowmobiling provides jobs for more than 160,000 people and contributes millions of doliars in taxes and registration fees annually to state and provincial governments. Anciliary businesses in the snowbelt states and provinces—such as grocery stores, restaurants, hotels, motels and service stations—annually realize additional economic benefit from the snowmobile industry and sport. It is estimated that these related

businesses generate a like amount of jobs and taxes.

When ISIA was founded, snowmobile manufacturers were producing approximately 30,000 machines annually. The machines manufactured in those early years bear very little resemblance to the ones being manufactured today, just a little more than a decade later. These vintage machines were essentially without exhaust silencing, and lacked other sophisticated features which are now standard equipment. They were, after all, the first models of a completely new type of vehicle—one which enabled man to travel with relative ease in places that had once been virtually inaccessible during the cold, boring winter months, while providing exciting new recreation possibilities on more familiar territory.

However, as more people bought these machines, there began to be criticism about their high sound levels—over 100 decibels in some cases. Improvement of the sound characteristics of the vehicle became one of the top research

projects in the industry.

Snowmobile noise reduction is not just a theoretical concept, nor is it only a laboratory project. It is a "real world" process carried on by hundreds, perhaps even thousands, of designers, engineers, production, marketing and management men and women who have been engaged in the snowmobile industry over the past ten or twelve years. This activity has involved not only the primary snowmobile manufacturers, but the manufacturers of mufflers, tracks, engines, carburetors, insulating materials and practically every other component part of the vehicle.

The early unmuffled snowmobiles, those produced prior to 1968, often emitted in excess of 102 decibels, when measured at fifty (50) feet, with the throttle wide open. Over the past nine years, most of that original noise has been removed from the machine. This achievement has been accomplished in the face of formidable obstacles. Consider that:

A snowmobile is frequently used when ambient temperatures drop to -40°F or lower, or rise to 60°F. The machine must be designed to function in an ex-

tremely wide range of temperature conditions.

A snowmobile is used in snow which may be 3 inches deep, or 30 feet deep. The operator must be able to lift the machine out of snow drifts. Thus its weight is a major concern.

A snowmobile is used at sea level, and at elevations of 10,000-12,000 feet

above sea level. It must have enough power to function at both levels.

A snowmobile is used by sixteen year old children, young adults and even 70 to 80 year old men and women. If it is too heavy or too cumbersome, its usefulness is virtually nil.

A snowmobile is used on narrow trails through wooded areas, as well as in wide open areas. It must have the maneuverability to permit change of

direction without exhausting the operator.

Beginning about nine years ago and responding to a clear need for quieter machines, manufacturers began a progressive noise reduction program. This effort was formalized in May 1974 with the formation of the Snowmobile Safety and Certification Committee, Inc.

The SSOC is a nonprofit membership association organized to promote, foster and encourage by any and all lawful means, the safe, enjoyable opportunities

for snowmobiling through:

Operator safety training and education programs;

Safe trail, use area and facility development;

Development of voluntary snowmobile machine safety standards and the in-

dependent certification thereof.

Membership is open to individuals, firms, partnerships, associations, public or private agencies, departments, boards or corporations interested in safe snowmobiling.

The SSCO has published a machine standards program which includes a standard for sound emissions. Effective February 1, 1975, all snowmobiles produced by participating manufacturers conform to these minimum safety standards. This coming season, manufacturers of 91 percent of all snowmobiles will

be participants in the SSCC Safety Certification Program.

Each conforming machine bears a certification label which means that the United States Testing Company, Inc. has independently confirmed that this model is in compliance with the standard. We feel this is an absolutely essential feature of the program for this reason, stated by the National Bureau of Standards:

"An accreditation, or third party certification, system is highly desirable to give assurance that the product actually conforms to the regulation." 1

Such a procedure assures consumers that snowmobiles so certified do in fact

conform to the regulations.

The SSCC standards program has been structured to be responsive to change. Any individual or organization can recommended a change to the standard that must be acted upon. This process involves a public review of any changes plus a review hy government officials, snowmobile club representatives, dealers and distributors in order to get a broad, informed evaluation of the proposal. In the thirty-six months since its organization, the SSCC has approved eight changes to the standard. Three more are currently being researched by the SSCC Technical Committee. In most cases, the actual test procedures used are recommended practices approved by the Society of Automotive Engineers. As you may know, the SAE also incorporates the views of a broad spectrum of engineering talent in its public review process.

The State of Wisconsin has joined the States of Maine, Vermont, Rhode Island and Pennsylvania in requiring that new snowmobiles sold in the state be independently certified as being in compliance with its 78 decibel snowmobile sound level regulations. As a result of the SSCC standards activity, all

<sup>&</sup>lt;sup>1</sup> Noise Measurements for Regulatory Purposes, by National Bnreau of Standards, 2/27/73, for Office of Noise Abatement and Control, U.S. Environment Protection Agency.

machines produced after February 1, 1975 by manufacturers participating in the program emit no more than 78 decibels when measured in accordance with Society of Automotive Engineers Recommended Practice J192a, Exterior Sound Levels for Snowmobiles. Effective June 30, 1976, these snowmobiles, in addition to meeting the SAE J192a test level of 78 decibels, must emit no more than 73 decibels when measured in accordance with Society of Automotive Engineers Recommended Practice J1161, Operational Sound Level Measurement Procedure for Snow Vehicles (Appendix A). The difference between these two tests is that the first is conducted at wide open throttle and the second is conducted with the snowmobile operating at a speed of 15 mlles per hour, which is typically found in their normal use (Appendix B).

The net result of this standards program is that during the past two winter sports seasons, we know that through the combined efforts of manufacturers who machines bear the SSOC label, approximately 350,000 safer, quieter snowmobiles are in the hands of consumers. And equally important, in each succeeding year, new machines, designed to meet environmental considerations, will be replacing the old vehicles that were the cause of a problem that no

longer exists.

At this point I would like to describe from two viewpoints the regulatory activities that have affected the industry: first, what should be considered and second, what has been done.

In establishing a noise control regulation, it has been recognized by the U.S. National Bureau of Standards that there are certain parameters which should be clearly defined:

"Fair and effective noise regulations must be technically, economically, and

administratively feasible and reasonable.

"Since noise regulations are designed to limit the exposure to noise of people, it is necessary to determine who is affected by a particular product and how the effects are manifested. Naturally, these factors are largely governed by the nature of the particular product and the way that it is used in its normal operating environment."

By the early 1970's, in response to the same excessive sound output of unmuffled snowmobiles, many snowbelt states, along with Canada, had enacted laws and regulations aimed at restricting sound emissions from snowmobiles.

By 1972, two general approaches to snowmobile sound level regulation were in evidence. The earlier and less complex path was selected by eight states which required that snowmobiles be equipped with an adequate muffler in working order. The second approach involved adoption of rules which set limits on maximum permissible sound levels of new machines. For 14 states electing this alternative, the most stringent law required sound levels no greater than 82 decibels. Similarly, throughout Canada, the law called for an 82 decibel maximum of 1973 machines. Since that time, several states have lowered their sound level requirements.

The present regulation of snowmobile sound levels is as follows:

The U.S. Federal Government has no regulation of snowmobile sound levels. The federal regulations of Canada and twelve states in the United States regulate snowmobile sound levels at 78 decibels on the "A" scale at fifty (50) feet.\* Six states impose a sound level requirement at 82 decibels on the "A" scale at fifty (50) feet. One state's 82 dB(A) requirement is measured at one hundred (100) feet. One state has an 84 dB(A) level measured at fifty (50) feet. Seven states require snowmobiles to have an adequate muffler in good working order. The remaining snowbelt states have no statewide regulation of snowmobile sound levels.

The attainment of a 94 percent sound reduction has been both difficult and expensive. While we do not have total cost figures, the cost of achleving the reduction in sound levels from 84 decibels to 78 decibels has been calculated. To snowmobile purchasers, this "cost of quiet" totaled over \$26 million at retail. The National Bureau of Standards states the axiom this way:

Wisconsin, New York, Maine, Iowa, Pennsylvania, Massachusetts, Montana, Connecticut, Oregon, New Mexico, Rhode Island, Minnesota, Michigan, New Hampshire, Vermont, Utah, Ohio, California.

Washington.

Colorado.

Colorado.

North Dakota, Idaho, Indiana, South Dakota, Alaska, Nebraska, New Jersey.

"It has long been recognized that as products are quieted more and more,

the incremental cost per decibel of quieting typically increases."

In an economic period characterized by a leveling off of consumers' discretionary incomes, many recreational industries have had to reduce their growth expectations sharply. The snowmobile industry in particular has been faced with costs rising significantly. A large part of these cost increases has been due to the sophisticated and expensive equipment necessary to bring about sound reduction.

The snowmobile price increases necessitated by sound reduction equipment, when added to those resulting from safety and other technological advancements, and basic labor and material cost increases, have had a serious dampen-

ing effect on snowmobile sales.

When faced with the adopted sound regulations which I have just tabulated. combined with spiraling costs and a shrinking market, a large number of manufacturers pulled completely out of the snowmobile business (Appendix C). During the period that total annual retail sales dropped from over 400,000 units in 1970-71 to an estimated 195,000 units in 1976-77 and regulated sound levels dropped from 84 decibels to 78 decibels, the total number of manufacturers dropped from over 110 to approximately seven who will market machines next season.

As recently as September 1973, there were 38 snowmobile manufacturers actively engaged in snowmobile production (Appendix D). The list of companies remaining in the snowmobile industry and expected to market 1978 modei year snowmobiles includes: Arctic Enterprises, Inc.; Bombardier-MLW Ltd.; Deere & Company; Kawasaki Motors Corp., U.S.A.; Polaris E-Z-GO, Div. Textron Inc.; Scorpion, Inc.; and Yamaha Motor Company, Inc.
I stated earlier that the United States Federal Government does not, at

present, regulate snowmobile sound levels. However, there has been a significant amount of interest at the federal level in snowmobiles by the Environmental Protection Agency looking at the effects of snowmobile sound or our citizens and our environment. The snowmobile industry's work in coordination with EPA has resulted in a better product being put on the market place. We feei this cooperative effort presents an example of what can be done to meet environmental goals without mandatory regulations or ili-considered requirements that would have had the effect of stifling a young industry.

In its Report to the President and Congress on Noise in December 1971, the EPA discussed snowmobiles along with motorcycles, all-terrain vehicles and

pleasure boats under the general category of recreation vehicles.

In September 1973, two important research reports were submitted to EPA. The first, prepared by Bolt Beranek and Newman. Inc., was entitled Rationale for the Identification of Major Sources of Noise. This report listed snow-mobiles among the top ten sources of A-weighted daily total sound energy, categorizing the machines with nonmilitary aircraft, iocomotives and construction trucks. The second research report was released in draft form my Wyle Laboratories. Both reports prompted the snowmobile industry to begin a long and meaningful dialogue with EPA about the realities of snowmobile sound emissions.

In October 1973, ISIA staff met with representatives of the EPA Standards and Regulations Development Division in the first of what was to become a series of conferences to exchange viewpoints and information. Over the next two months ISIA provided a comprehensive compilation of data on snowmobile sound level developments to the EPA staff.

Before this ISIA information could be assimilated by EPA, two additional EPA sponsored research reports were made public: in December 1973 the International Research and Technology Corporation study, The Impact of Noise Abatement Standards upon the Snowmobile Industry; and in February 1974

the final report from Wyle Laboratories.

Based upon industry and staff analysis of the contractors' technical reports for EPA, ISIA submitted to EPA in the spring of 1974 extensive comments

on the contractors' research.

We know that the information provided by ISIA was being given due consideration by EPA because in June 1974, when EPA published the initial report of major noise sources in the Federal Register, snowmobiles were omitted from the listing.10 At that point in our dealings, EPA wrote to ISIA in part as follows:

Noise Measurements for Regulatory Purposes.
 The Federal Register, Vol. 39, No. 121, June 21, 1974.

"This Agency recognizes that our information relating to snowmobile noise characteristics and impacts is incomplete. You may be aware that the EPA Office of Noise Abatement and Control is planning to initiate a comprehensive study which will explore a wide range of issues relating to snowmobile noise. The information gathered in this study will be used in assessing the extent of the snowmobile noise problem, and will form the basis for an evaluation of the need for a future snowmobile noise emission regulation."

In May 1975, when EPA added motorcycles, buses, wheel and track loaders, wheel and track dozers, truck transport refrigeration units and truck-mounted solid waste compactors to the list of major noise sources, snowmobiles were listed as a possible candidate for Identification as a major noise source. The Noise Control Reporter contained this amplification on the status of snowmobile

regulation:

The EPA judgment to temporarily defer identification of snowmobiles takes into account consideration of voluntary standards being developed by the snowmobile industry. Major progress has been made in that regard, and continuing action is underway. EPA is in the process of evaluating this voluntary industry effort. In so doing, EPA is taking into account the fact that much of the noise impact associated with snowmobiles affects operators and passengers in recrea-

tional and other voluntary activities." is

In July 1975, snowmobiles were once again the subject of Federal studies. This time contracts were awarded to four research organizations at a total cost of some \$220,000. Booz-Alien Applied Research was given responsibility for studying the economic impact of a sound level regulation for snowmobiles; Cambridge Coliaborative looked at the technical feasibility of a sound level regulation for snowmobiles; Science Applications was charged with catalogular lexisting sound level regulations in the U.S. affecting snowmobiles; and Wyle Laboratories was to prepare an environmental impact statement relating to a federal snowmobile sound level regulation.

In the ensuing months the industry has worked closely with the EPA contractors. A great deal of information has been provided by all manufacturers. Conferences have been conducted to resolve questions and to explore noise

stiencing approaches suggested by the EPA contractors.

As a part of this activity, in February 1976, the United States Testing Company conducted a demonstration for EPA officials at Brainerd, Minnesota using 1976 model snowmobiles. The scope of the demonstration included the two test procedures used to measure snowmobile sound levels at wide open throttle and at 15 miles per hour. In addition, the attenuation effect of increased distance, and the attenuation caused by a living shelter, using a mobile home, were demonstrated. Perhaps the most convincing illustration of the success of the industry in reducing sound levels was achieved when a 1969 model which passed at a distance of 50 feet, traveling at wide open throttie, was measured at 104.4 dB(A). It was followed by half a dozen 1976 models each of which were at least 26 decibels quieter.

In January 1977, snowmobiles were once again listed by EPA as a possible candidate for future identification.<sup>13</sup> It was noted that snowmobiles were still under study, an obvious reference to the four research projects that are scheduled to be completed this summer. The industry is looking forward to the release of the information compiled by the EPA contractors over the past two

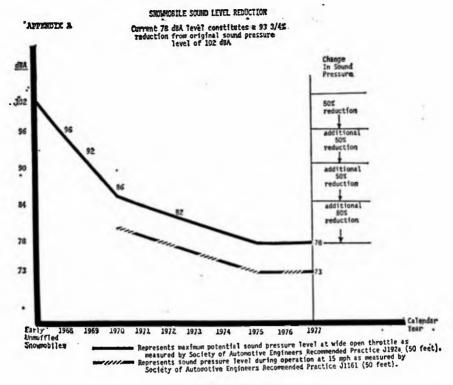
years.

In summary, the words of one of our founding fathers seem appropriate. In his first Inaugural Address Thomas Jefferson described a wise and frugal government as one "... which shall restrain men from injuring one another, which shall leave them free to regulate their own pursuits of industry and improvement, and shall not take from the mouth of labor the bread it has earned." What I have described for you today is an example of how an industry, working in cooperation with a federal regulatory agency, can meet the needs of the citizens of our country without the imposition of federal mandatory standards.

Thank you for your attention during my presentation of this statement. If there are any questions, I will attempt to answer them.

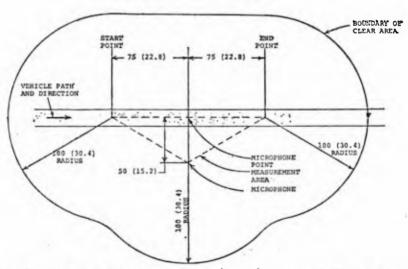
<sup>11</sup> The Noise Control Reporter, No. 27, May 26, 1975.

Ibid.
 The Federal Register, Vol. 42, No. 8, January 12, 1977.



## APPENDIX B

# SHOWMOBILE SOUND LEVEL TEST SITE LAYOUT



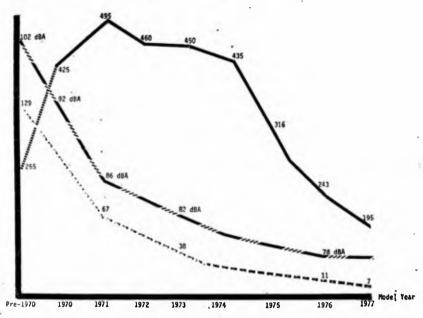
NOTE: THE START AND END POINT ARE SHOWN FOR A LEFT-TO-RIGHT VEHICLE PASSBY THESE. SHOULD BE REVERSED FOR A RIGHT-TO-LEFT PASSBY.

DIMENSIONS ARE FT (m)

EAE J1922 & SAE J1161

APPENDIX C

Snowmontle Sound Levels-Industry Retail Sales-Number of Active Handacturers



# APPENDIX D

# SNOWMOBILE MANUFACTURERS-IDENTIFIED BY WYLE LABORATORIES

Alouette Featherweight Corporation Montreal 364 Quebec, Canada

Aisport, Inc. 84 Whittlesey Avenue Norwaik, Ohio 44857

Arctic Enterprises, Inc. Box 635 Thief River Falls, Minnesota 56701

Auto Skl, Inc. P.O. Box 97 Levis, Quebec, Canada

Autotechnic Inc.—Ski-Zoom 2300 LeMire Bivd.—Drummondville P.Q., Canada

Boa-Ski, Inc. P.O. Box 460 La Guadaloupe Frontenac County, P.Q., Canada

Bombardier Ltd. (Ski-Doo/Moto-Ski) Valcourt P.Q., Canada Brutanza Engineering P.O. Box 158 Brooten, Minnesota 56316

Chaparral Industries Denver, Colorado 80216

Coleman Skiroule Route 13 Wickham, Quebec, Canada

Columbia Div. of MTD Products, Inc. 5389 West 130th Street Cleveland, Ohio 44111

John Deere & Co. John Deer Horicon Works Horicon, Wisconsin

Fun Seasons, Inc. 1200 Riverwood Drive Burnsville, Minnesota 55337

Gilson Snowmobiles Road America Grounds Eikhart Lake, Wisconsin

# APPENDIX D-Continued

# SNOWMOBILE MANUFACTURERS-IDENTIFIED BY WYLE LABORATORIES

Griswold Swinger 1212 Chestnut Avenue St. Paui, Minnesota 55403

Hariey-Davidson Motor Co., Inc. 3700 West Juneau Avenue Miiwaukee, Wisconsin

Herter's Inc. Plant 1 New Richland, Minnesota 56072

Jac-Trac, Inc. Route 2 Marshfleid, Wisconsin 54449

Lori Engineering Corporation Oid Turnpike Road Southington, Connecticut 06489

Massey-Ferguson, Inc. (Ski-Whiz) 1901 Bell Avenue Des Moines, Iowa 50315

Melvin Manufacturing Company Dryden, Maine 04225

Mercury Marine Fond Du Lac, Wisconsin

Moto-Kometik ,Inc. P.O. Box 490 St. Jean Port—Joli, Quebec, Canada

Northway Snowmobile Ltd. 100 Hymus Blvd. Point Ciaire ,Quebec, Canada

OEM Ltd. 584 Clinton Avenue Sudbury, Ontario Canada

Ontario Drive and Gear, Ltd. P.O. Box 280, Bieams Road New Hamburg, Ontario, Canada Outboard Marine Corporation 4143 North 27th Street Milwaukee, Wisconsin 53216

Polaris Roseau, Minnesota

Leisure Vehicles, Inc. (Raider) 2766 Eliiott Troy, Michigan 48084

Raybon Manufacturing Company, Inc. 25 George Street Wailingford, Connecticut 06492

Roil-O-Flex Regina, Saskatchewan, Canada

Rupp Industries, Inc. 1776 Airport Road Mansfield, Obio 44903

Scorpion Crosby, Minnesota 56441

Sno\*Jet, Inc. P.O. Box 246—Ouellet Bivd. Thetford Mines P.O., Canada

Speedway ,Inc. 160 E. Longview Mansfield, Ohio 44905

U.S. Sports Riverside Airport Marcy, New York

U.S. Suzuki Santa Fe Springs, California 90670

Yamaha International Corporation 6600 Orangethorpe Avenue Buena Park, California 90620

Mr. Rooner. I would like to commend your association for what you have done to improve the industry's doings. I can remember back in the 1960's everybody wanted to put you out of business. Then I can recall back in 1973, during the energy crunch, you were one of the first they attacked because of this problem. You have come a long way. Congratulations.

Mr. Doyle. Thank you very much.

Mr. Rooney. That will conclude our hearings on the noise problem. Thank you.

[The following statement was received for the record.]

# STATEMENT OF ALVIN F. MEYER, JR., PRESIDENT, A. F. MEYER AND ASSOCIATES, INC.

OBSERVATIONS ON EPA'S IMPLEMENTATION OF THE NOISE CONTROL ACT OF 1972—A RETROSPECTIVE VIEW—WITH COMMENTS ON IMPLICATIONS TO OTHER NEW PROGRAM LEGISLATION

As one of the individuals who was deeply involved in the enactment into law of the Noise Control Act of 1972, and then with its implementation for almost the full first five years of its existence, I am most pleased that this Committee is holding hearings on the Act, as suggested in the GAO Report of March 7, 1977, "Noise Pollution. . . ". In the main I agree with the observations of the General Accounting Office, though in some instances it does not address root causes of problems, and in other areas it does not give as broad a discussion as might be desired.

Some months ago, I prepared a commentary on my views of EPA's implementation of the Act which was published in Sound and Vibration magazine, and which sheds some light on the EPA program; and a copy is submitted herewith for the record. In particular I call attention to comments therein regarding the compromises which had to be made in order to get the Act enacted and which have had a pervasive influence on subsequent actions affecting the Act. Also there are comments therein regarding "Strategy" which may be useful to

the Committee.

My comments in this statement are based on a retrospective examination of the EPA's performance, cast against the light of my broad prior experiences as a senior official responsible for major USAF and DOD programs in the broadest aspects of environment and occupational health, and those subsequent to my EPA experiences as the head of a consulting firm dealing with those specialties. In the main, it is my view that the underlying reasons for the valid findings of the GAO Report may be characteristic in varying degree of those affecting new programs created by the Congress. To a degree, then, this is a case history from which some lessons, hopefully, can be learned, and thus avoid problems which contribute to public distrust of government, including all branches. That distrust arises when "government" does not live up to the expectations it creates.

Underlying Causation

In the main the key nnderlying causes of the slow progress in implementing the Noise Control Act of 1972 include:

1. The absence of a clear legislative history, as to Congressional intent on such key requirements as "coordination", and especially on the finally enacted version of the statute.

2. Collateral to that, the inclusion in the Act of some provisions about which there was little or no testimony or public hearing, such as those requiring issuance of the "Levels Document", and those relating to Interstate Rail and Motor Commerce.

3. The lack of a finite Congressional procedure to insure that adequate resource authorizations will be available consistent with the legislative mandates

of the statute.

Virtually all of the deficiencies cited by the GAO are in one way or another attributable to the foregoing. Another major problem affecting the early days (first two years) of this Act was the subtle, but nonetheless real, influence of the view of high administration and agency officials of the relatively lower priority of noise, as relates to air and water pollution. Before going on, from my broad perspective I find that I cannot fault that basic premise. It should be kept in mind that the existing Administration had proposed legislation which had no mandatory deadlines for regulations, placed EPA in a "veto" position over the FAA's noise rules, and "promoted coordination", rather than "coordinating research and programs." Such a relatively passive approach, in retrospect, was clearly more consistent with higher priorities for air and water control, if indeed the resources projected as being required, about which more will be stated, were in fact not to be made available. The record is clear that this was indeed to be the case. Many of the disappointments of supporters of the Act and key staff of ONAC would have been averted if this approach had been brought to the fore before the Act was passed, or if the afore-cited need for more adequate procedures for resource funding of new program legislation had been in existence and implemented.

# Commentary on Problems

Some brief comments on the basic three underlying causes of difficulty are in order. They follow:

The Lack of Clear Legislative History

Although the legislative history is fairly clear as to the hearings on the various House and Senate versions of pending legislation, there are notable gaps, especially since there was no Conference Committee, and thus no Conference Report, on the bili as enacted. The only guidance on a number of issues, including the one of technical assistance raised in the GAO Report as to states, is found in Senator Tunney's remarks re the Act before final Senate passage.

is found in Senator Tunney's remarks re the Act before final Senate passage.

One of the main deficiencies is the lack of definition or elaboration of what was really meant by the term "coordination." The word means many things to different entities in government. To some, it means directing and bringing order out of divergent but related activities. To others it means advising affected elements so that they can take appropriate action to modfly their courses of action or to inform the originator of adverse features of the planned approach. Another governmental view of coordination is that it is a means by which a proposal is subject to scrutiny of others, and in effect gives them a means of concurrence or nonconcurrence. To a large measure the now discontinued so-called "Quality of Life Review" of EPA regulations was that form of coordination.

There is little wonder that there has been disagreement and even agency "hostility" to the EPA "coordination role" assigned it in the Noise Control Act. Congress should more clearly define the expected role, both in future amendments to the Noise Control Act and in any other legislation when it prescribes

such a role for one agency or department vis-a-vis other agencies.

Further, insofar as interagency relations are concerned, some means of resolving the inevitable conflicts must be established in the statute. I was one of the principal authors of the compromise which led to the Sec. 7 provisions relating to EPA-FAA interaction on aviation noise. At the time I recognized, as I believe did most others, that the provisions for referral of unresolved disputes to CEQ, either under Sec. 309 of the Clear Air Act or the Noise Act still left the door open for the unsatisfactory situation between EPA and FAA so

well described in the GAO Report. At a recent meeting on Environmental Carcinogens I asked the Comptroller General, Mr. Elmer Stats, if based on his long experience he saw any effective means of dealing with this problem, which is not unique to the Noise Control Act. The failure associated with the "coordinating" role assigned to CEQ under NEPA is a case in point. I gathered from his response that he shares my present view-there is no easy solution. No matter how well or how poorly staff level personnel interact, the problem of differing Cabinet and Sub-Cabinet level officials' views of the particular policy responsibilities cannot be easily resolved by assigning to one some degree of authority impinging on the others. Prior to its abolition by President Nixon, the former Office of Science and Technology, representing as it did the Office of the President, was able to effect a greater degree of "coordination" on scientific matters, because in effect it represented the President. Certainly my experience in working with OST and the Department of the Interior in the successful development of the first Interagency Contingency Plan for Combatting Oil Pollution of the Sea is an example of how leadership from that level can be effective. I respectfully suggest that this whole matter of interagency interaction needs rethinking.

Perhaps the mechanism in the Toxic Substance Act of a formal interagency committee is the answer. A mechanism to resolve the disputes which inevitably arise, especially if one agency is charged, as the EPA is in the Noise Control Act, with an ill-defined responsibility regarding research which can affect another agency's budget. Another important part of the solution to the messy situation typified by EPA's responsibility and accountability for "coordination" but with no authority to enforce it (what does happen in reality being well stated in the GAO Report) would be much more precise definition in the legislative history as to what is meant by "coordination" and what the Congress

expects of the various agencies.

## The Implications of Inadequate Consideration of Key Elements

Perhaps one of the most significant, if not indeed the most important, elements of the Noise Control Act is the requirement in Sec. 5 that the Adminis-

trator Issue a document Identifying "Levels of Noise Requisite to Protect Public Heaith and Welfare." There was much testimony by administration and other witnesses on the need for a regulatory scheme based on an analysis of health and welfare criteria, analogous to those of the Clean Air Act, available technology and cost of control. There was little or no testimony or discussion as to the need for the additional step of finite specification of the goals of what might be viewed as the absolute for safety. In fact, so obscure was this requirement that Senator Tunney had to await clarification by the Administrator of the Intent, during the lengthy delay in preparation of the document. In part, that delay can be attributed to the fact that much of the lively debate regarding the document that took place could have been avoided if proper hearings on the matter had been held.

This particular issue is of special relevance, since in fact the "Levels Document" has, by its nature, become the crucial element of the entire EPA regulatory scheme, its proposals to the FAA, and will have to be central to any recommendations as to long-range goals for state and local governmental action.

The Interstate Rail and Motor Carrier provisions were never considered in the House, were not the subject of any detailed hearings in the Senate, and were enacted without much opportunity for a thoughtful examination of what the Congress really intended. Again, because of the lack of that guidance, and assignment of responsibilities to two agencies, the stage was set for the situation described in the GAO Report.

I suggest that the solution to this sort of problem rests with the Congress.

# The Impact of Lack of Resources

Even with an adequate iegislative history, based on full analysis of the major issues and components of the legislation as enacted, without adequate resources no statutes and promises to the public can be fulfilled. While that was not explicitly stated in the GAO Report, the gross underfunding of the implementations of the Act in the first 2-3 years created a situation which compounded

itself, and is only now beginning to be mitigated.

A great deal has been sald in the GAO Report about the various "strategies" for implementation of the Noise Control Act, and as to the need for a comprehensive strategy, especially for the years after 1974. One very relevant fact relating to this very important issue was omitted from the GAO Report. EPA's ONAC did indeed propose a comprehensive Implementation Plan for the Noise Control Act, prior to its enactment. That strategy/plan called for completion of all mandated actions and issuance of regulations for all products (approximately 70) discussed in the 1970 Clean Air Act, Title IV "Report to the Congress on Noise", within five years; the institution of a labeling program; the establishment of a comprehensive state and local assistance program; and undertaking of coordination and research programs. Detailed timetables and staffing and funding requirements were drawn up. Copies of the milestone charts and other relevant material are herewith submitted for the record. The funding estimates are similar to those contained in the Report of the Committee on Interstate and Foreign Commerce on HR 11120.

The stratey described in the GAO Report as being prepared approximately two months after the Act was passed was a hasty effort to come to grips with "reality." The Act, with its deadlines, was a reality, but the needed resources were not. ONAC did call to the attention of the Agency's appointed officials that in effect the approved version of the strategy represented a "conscious stretchout" of the Noise Control Act. The rationale for that stretchout was based on higher priorities for the Agency's scarce resources, as stated by Administrator Train in his comments to OMB and in response to Congressional

liquiry re delays in the program.

Another Important point not stated in the GAO Report is that shortly after ONAC was moved to OAWM a proposal was made by ONAC that in view of the pending expiration of the three-year authorizations for the Noise Control Act (in 1975) a comprehensive study be made of all elements of the Act, in light of the Agency's progress thereon and lessons learned, with a view toward developing concurrently both a new strategy and a more realistic approach to the entire Act. For reasons which are obscure, that comprehensive approach was not adopted.

I think it is important at this point to emphasize that there are many types of strategies. Ali in effect establish goals and then allocate resources for the objectives which must be achieved to meet those goals. Some are "global"—others almost border on "tactical plans." In the case of implementation of an act of Congress, where resources are not sufficient to meet ali the mandates, as was the case in Noise in 1972-1975, global type strategies are useful but may not be realistic. If indeed such documentation is to be useful, as I believe it can, then it must lead to either resource reallocation or to changing of the scope of the goals and objectives. I am hopeful that my successors in ONAC and the new Administrator and Assistant Administrators of EPA can produce a strategy which represents a true statement of what the end result is to be and which constitutes a commitment to provide the resources needed for a realistic timetable of events.

I suggest that the "strategy" for a new program, and its accompany implementation plan and the necessary first year's budget authorizations, must be a prerequisite for any new legislation, constituting a new program. The first two of these clearly could be called for in the "rules" of the two Houses of Congress, as a prerequisite to even considering a proposal. The new congressional budget procedures seem to require this, but not to the degree of specificity I have in mind. The third may require some change in the way the Congress enacts enabling, and then authorizing, legislation. I am convinced

that such changes would be in the public interest.

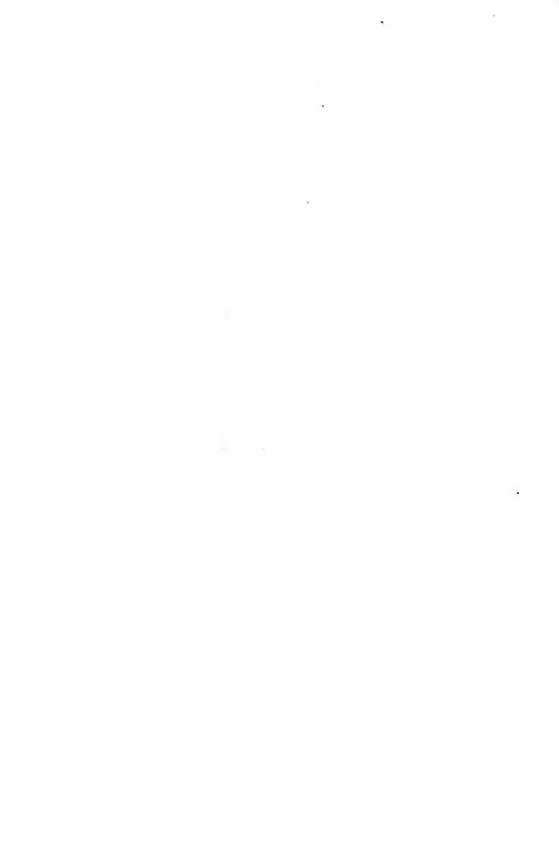
There is another major change I would suggest, for insuring that once a statutory program is iaw it is undertaken as the Congress intended (regardless of adoption of the improvements I have suggested to avoid problems at the outset). After most careful deliberation I think that the following are needed. First, oversight hearings as to progress under an Act ought to be the responsibility of the Committee on Government Operations, rather than of the enabing committees. Secondly, the "Annuai Reports" or similar reports to the Congress called for in various Acts should be prepared by the Generai Accounting Office. I believe that more objectivity and a considerable improvement in agency performance will result.

I believe that the suggestions I have offered, taken together with other proposals on regulatory reform, would enhance the effectiveness of Federal regulatory programs. This would especially be true if all such programs had to be

redefended before the Congress every five years.

[Whereupon, at 4:30 p.m. the subcommittee adjourned.]

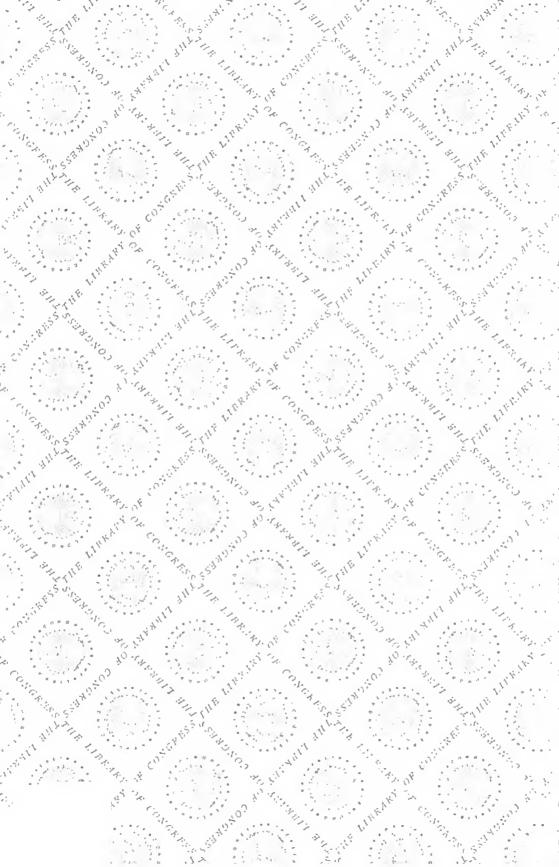
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# N. MANCHESTER, INDIANA



